Dr. Manning's Mill

By KATHARINE S. THOMPSON

WHEN Dr. John Manning announced that a modern woolen mill in Ipswich was a necessity, his fellow townsmen cannot have been surprised, although in 1791 there was not a single power-driven woolen mill in Massachusetts, and only one in the United States. Ipswich had been obeying the benevolent commands of the Manning dynasty of doctors ever since 1725 when the founder, Dr. Joseph Manning, just graduated from Harvard, had come back to his native town to begin practicing medicine. Dr. Joseph's iron hand, and iron mortar and pestle, had presided over the fevers and accidents of more than half a century, and he had laid aside pill pots and gallipots only on his death in 1787. By then, his son John had been practicing in Ipswich for nearly thirty years, and three of John's sons (and one son-in-law) would in their turn become doctors, so that the dynasty was to last 125 years.

Dr. John Manning wanted to cure bodies, but he wanted still more to cure the body politic. His mind was bolder and more restless than his father's, impatient with the old ways, searching out and experimenting with new ones, caught up in the tornadoes of ideas which were boiling on both sides of the Atlantic. He carried the country doctor's highhandedness, his conviction of knowing what was best for his patients, and determination to enforce treatments he had prescribed, into science, government, religion, and social reform. Acting, as he said, "Under the dictates of Humanity and an earnest desire to promote the welfare of his native town,"[1] he had taken upon himself responsibility for its economic as well as its physical health.

His independence and restlessness had shown themselves early. He had not followed his father into Harvard. Unquestionably, he had picked up considerable knowledge and experience from Dr. Joseph, and he spent his twenty-first year working with a doctor in Newmarket, New Hampshire. But except for his years in the traditionally excellent Ipswich grammar school, he had had no formal education when in 1760, at twenty-two, he came back to Ipswich, married and settled down to practice.

During the next eleven years, he became convinced that the old lore which had been passed on to him was not enough, and that he needed to learn modern medicine and techniques. In 1771, leaving his practice, and his wife and five children, he went to England for a year, where he learned "Proper Remedies in all cases of Physick, Surgery and Midwifery."[2] The remedy that really excited him, however, was inoculation for smallpox.

The epidemics which had swept Boston early in the century had taught Bostonians the efficacy of inoculation. Ipswich, having escaped the epidemics, still regarded inoculation as a certain source of the disease rather than as a probable cure. Dr. John had not been long returned from London with his crusade before he challenged the opposition head-on with an advertisement in the *Essex Gazette* of November 23, 1773:

Dr. John Manning
Being acquainted with the Animal Economy

and medical practise, is thoroughly persuaded that Inoculation for the Small Pox is a very useful Discovery. . . . I began first on myself and two others of my Acquaintance at London in the month of February AD 1772, with the advice of Mr George Neale, Surgeon of the London Hospital. . . . I continued improving in the practice of attending in various subjects, both under the natural and artificial infection, and procured all the modern and famous Authors thereon.

While awaiting other patients, Dr. Manning proceeded to inoculate his wife, his brother Jacob, and Hannah Caldwell "in the body of the town" and when the pox broke out on them, moved them to the pesthouse on Wolf Pen Plain. The town was outraged; a special Town Meeting was called on January 31, 1774,

to consider what method is best to be taken respecting some evil-minded person Endeavoring to spread the Small Pox amongst us by Innoculation without the Consent of the Town or even of the Selectmen, which we apprehend is against Law. . . .

Dr. Manning was forbidden to leave the pesthouse, or to do any more inoculating; he was even threatened with prosecution. But the smallpox patients recovered, and no more cases appeared, so feeling against him died down. In April, 1778, he finally won his crusade: the town voted permission to "such persons as wish to be inoculated" and thereafter inoculation remained legal in Ipswich.

In the meantime, his bold and energetic altruism had found other outlets. When the first fighting of the Revolution broke out in April, 1775, he decided that his sister, Mrs. William McKean, would be safer in Ipswich than in Boston, so he set out in his chaise to fetch her. Reaching the battlefield, he came upon a wounded British officer, and as a matter of course, took care of him. As a reward, the British allowed him to enter Boston and bring out Mrs. McKean. It was the middle of the night before they were back in Ipswich, but Dr. Manning unhesitatingly roused his family and set them to gathering supplies for the wounded; with everything that the town could marshal, he returned to the battlefield. When he had finished caring for the American wounded, he helped the British surgeons. He saw to it that both groups of wounded were carried to Cambridge, where he stayed six weeks longer until they were discharged. Throughout most of the Revolution, he served as an army surgeon in Newport, Rhode Island; though only seventeen, his eldest son, John, Jr., was there also, as surgeon's mate.

When Dr. Manning returned to Ipswich, the town had forgotten that it ever thought him "evil-minded" and offered him every opportunity to gratify his desire to serve it. Whatever office was vacant, he was appointed to fill. If the moderator was absent at Town Meeting, he was called upon to preside. He sat on countless committees—to oversee the clam banks, to survey the highways, to visit the schools, to take care of the poor. He even once allowed himself to be named culler of bricks.

Besides all these small offices, the town gave him the highest in its power; it sent him to represent it at the General Court eight times between 1782 and 1795. Characteristically, he saw membership in the Legislature as another opportunity to serve his town and state.

In 1788, he, with others, made proposals to the Legislature for taking the poor of the Commonwealth which were in the alms-house at Boston and removing them to Ipswich, where, with the selectmen to act as overseers, the projectors of the plan would supply them with lodging, wholesome food, and medical attendance for ¾ of the then present expense.[3]

But it was the poverty of Ipswich that

most concerned him. Seaboard Massachusetts as a whole had suffered heavily from the Revolution. Trade had been halted; most of the young men had been away from home for years, serving in the army or on privateers; many had been killed. The little ships which had always gone out all the little rivers to fish off the Grand Banks, or in Massachusetts Bay, had been damaged or sunk, and England had closed the West India trade to her seceded colonies.

Ipswich was worse off than most neighboring towns, because the expectations of its distinguished founders had not been realized. The river, on which their hopes had been based, had proved a disappointment; though it is long, its upper reaches are marshy and to this day largely undeveloped, and below the town its narrow and winding course toward its great bay is blocked at the mouth by sandbars. Too many houses had been built in the center of town; too many people lived in them without trade or resources. In Dr. Manning's own words:

> the large and ancient town of Ipswich . . . has become very poor, having contracted a very heavy debt, to carry on the late war, and having a very large proportion of the Town's poor to support, which are daily increasing, and little or no business carried on in said town except the culture of the ground, and almost all the farms have been divided and subdivided so as to yield little more than a supply of provisions for the owners. . . . [4]

As desperately as Ipswich needed employment and money, the Commonwealth and the nation needed manufactures. The new-won political independence would be of little use until economic independence was established. Spinning wheel and hand loom could not begin to clothe the new nation, which had outgrown not only its old garments but its old ways. Yet to continue to import was to invite disaster.

As a member of the Legislature, Dr. Manning knew that many propositions were being made for the encouragement of American manufactures, especially the textile ones. Ever since 1640, the Legislature had considered as one of its functions the encouragement of textile manufactures by exhortation, by bounty, and by land grant.

England on her side had early recognized the connection between the economic and the political independence of her colonies, and the paramount importance of textile manufactures. In 1705, Lord Cornbury, governor of New York, warned the British Board of Trade:

> if once they [the colonies] can see they can cloathe themselves, not only comfortably but handsomely too, without the help of England, they, who are not very fond of submitting to government, would soon think of putting in execution designs they had long harboured in their breasts. This will not seem strange, when you consider what sort of people this country is inhabited by.[5]

The British government had forbidden the export of North American woolens, but it had also been wise enough to see to it that plenty of English textiles were available in its colonies at reasonable prices. After the Revolution, still more determined to maintain its monopoly on cottons and woolens, it forbade the exportation of any of the great new inventions in machinery which had revolutionized the making of cloth, and all but prevented the emigration of skilled mechanics. Thus, although a few Hargreaves jennies and carding machines were smuggled into America, none of the Arkwright power-driven machines, either the first ones which ran by horsepower or the later ones, by water power, had reached these shores or been successfully constructed here. Meantime, England flooded the American market with textiles mass-produced in its modern mills.

James Bowdoin, governor of Massachusetts, told the Legislature in 1785 that "The extravagant importation of foreign manufactures since the conclusion of the war has greatly injured our own, particularly in wool."

He recommended to them to "project some method by which we may obtain models of several machines, or the machines themselves, lately invented for manufacturing woolen cloth."

The Legislature responded by voting a subsidy of £200 to two newly arrived Scottish brothers named Barr, to complete machines for carding, roping and spinning wool and cotton. But the machines which they constructed in 1787 and which were proudly called "The State Models" proved to be almost useless.

The breakthrough in cotton manufacture took place in that same year, and in Dr. Manning's own county of Essex.[6] In 1787 a group of Beverly merchants, headed by John Cabot, hired Thomas Somers, still another British mechanic, to supervise the construction of machines for them. To house these machines, they built a "manufactory" 60 feet long and 25 feet wide, with pitching shingle roof, at the corner of Dodge and Cabot Streets in North Beverly.

Situated only a few hundred feet from what is now Route 128, the Beverly Cotton Manufactory foreshadowed all the other laboratories of technological revolution which edge its course in our day; and few of its successors have been so epoch-making; for it was the first cotton factory in America to be successfully power-driven. In its deep basement, a span of handsome, heavy chestnut horses, plodding round and round, supplied the power for some of the machinery; and if they were driven by a fourteen-year-old boy, and their speed rather informally regulated by Thomas Somers' shouts out the window two stories above, nevertheless, it marked a dawn in which everyone concerned was blissful to be alive.

Few travelers along the Bay Road failed to stop and marvel at the manufactory. President Washington, touring New England in the fall of 1789, was greatly inpressed: the machinery seemed "perfect" to him, and "the cotton stuffs which they turn out excellent of their kind." The Reverend William Bentley was forever finding new reasons for admiration.

Surely Dr. Manning, on his way to and from the General Court, must have made a practice of breaking his journey in North Beverly, and surely he went on deep in thought and hope. The sight of all the Beverly women and children employed at the manufactory, many of whom would otherwise have been, in the words of the proprietors, "useless if not burdensome to society" must have recalled to him the many widows and orphans of Ipswich.[7] Not only were they needy: they had been brought up in a traditional skill which might well be retrained to modern techniques. For more than a century, pillow lace had been a cottage industry in Ipswich, carried on for the most part by women and children. Between August, 1789 and August, 1790, some 600 workers—one in every seven of the town's population—had produced nearly 42,000 yards of lace and edging.[8] What could they not achieve if they worked regular hours with labor-saving machinery?

Furthermore, although Hartford, Connecticut, had already set up the first American woolen manufactory working in part at least by water, it was still open to Ipswich to have the glory of the first power-driven woolen mill in Massachu-

setts, and to Dr. Manning to have the excitement of bringing it into being.

It was in February, 1791, that he began his new crusade. He presented a memorial to the General Court, setting forth that Ipswich "being so full of inhabitants, is well calculated for a manufacturing town, and wants nothing but ability to promote a very useful branch thereof, viz. the woolen manufactory. . . . " He himself, he continued,

being desirous to be as useful as possible, ever has been, and still is, disposed to apply all the property, that falls to his lot, in that way which may do good to himself and the community at large, and has hereby been prompted to even exceed his ability by loaning to the Publick all the property that he could any ways command, and now he humbly conceives that his property would be of much advantage to the poor town of Ipswich, and the country at large, by being employed in setting up and carrying on a woolen manufactory within the aforesaid town. Therefore he humbly prays your Honours to take the matter into your wise consideration and pay him out of the proceeds of the State Lottery, or any other way that to your Honours may seem meet, £1200 or £1500 of the sum which he has Government securities for, to enable him to set up and carry on the business aforesaid, he becoming obligated to employ the sum, that may be so paid him, wholly in and for that purpose; and your petitioner further prays that the buildings, that may be erected for the aforesaid purpose, and the stock, that may be thus improved, may be exempted from Taxation for such a term of years as to your Honours may seem meet and reasonable.[9]

The General Court took a year to act on Dr. Manning's petition. The famous Beverly Cotton Manufactory had already run into difficulties; its promoters had petitioned the Legislature for some "very considerable advancement," and it was to them that £700, to be raised by lottery, was granted in March, 1791. Not until March, 1792, was Dr. Manning's petition approved; the Legislature resolved:

That there be paid out of the Treasury of this Commonwealth the interest due to him on the State notes, which he holds in his own name, and so much of the principal as shall amount, with the interest, to one thousand pounds, he, the said John, first lodging in the hands of the Treasurer three hundred pounds in consolidated notes of this Commonwealth, to ensure . . . that the said one thousand pounds shall, within one year from the passing of this resolve, be employed in a woolen manufactory within the town of Ipswich, and in case of failure, said three hundred pounds to be forfeited. . . .[10]

If, at the end of a year, the selectmen of Ipswich should certify that the £1,000 had indeed been used to set up a woolen manufactory, then Dr. Manning was to recover his £300. The stock and building were to be exempt from taxation for ten years.

Undiscouraged by this scarcely generous grant, Dr. Manning went ahead with his plans. Less than two weeks later, the Town Meeting of March 13, 1792, voted to grant him land at the western approach to the Choate bridge, where Caldwell's block now stands. It was "to begin in front 6 feet from Mrs. Elizabeth Brown's house, to extend 50 feet front toward the well [wall?] and one foot on the wall, and to extend 30 feet back toward the River."

Even before he started to build, he must have decided that he needed more land; but his request was refused on July 15, 1793. The report of the Town committee named to consider his petition was affectionate and regretful: it was signed by John Heard, an Ipswich merchant who had sat on many another committee with Dr. Manning:

1. That the Town do approve of John Manning's setting up and carrying on a wollen Manufactory in this Town and wish him success therein.

2. That it appears to your Committee that the State of the Town is such that they are not able at present to assist him; therefore they

recommend it to individuals to assist said John Manning Esq in setting up and carrying on a wollen Manufactory in this Town by Subscription in Money or such other way as may be most convenient.[11]

Dr. Manning seems to have gone ahead with his building, anyhow, but renewed his application for more land. The Town meeting of March 4, 1794, sadly shrunken by the secession of the prosperous Ipswich hamlet and aware of the consequent crucial need for new resources, appointed a committee. This time, the committee reported favorably because "they consider manufactures introduced into a Town of essential Benefit to such a Town, more especially so important a branch of manufactures as that of the wollen."[12]

The completed building was of wood, two stories high, 105 feet long and 32 feet wide, with plain pitched roof. The mill must have been in operation by mid-1794, for Henry Wansey, a Wiltshire clothier who made an inspection tour of American textile establishments that summer, mentions it in his journal.[13]

According to Bagnall

The upper story, only, was devoted to manufacturing. More than ¾ of the lower story was finished as a hall, for religious and social purposes, being furnished with pews. Next to the hall was the staircase leading to the factory, and the remainder of the story was divided into two rooms, and occupied as a law-office.[14]

On the roof, over the center of the building squatted a great octagonal tower, "to sustain the arms and sails of a windmill, by which it was proposed to operate the machinery." For though Dr. Manning's mill stood on the very edge of the Ipswich River, it was powered by wind; it was "the only case, as far as we know, in the history of manufactures, of the application of wind to drive textile machinery."

Bagnall's description suggests that he did not know how extraordinary Dr. Manning's windmill was; clearly he visualized the usual windmill, with an arm projecting from the tower to hold sails which rotated vertically. But Dr. Manning's was an horizontal mill—a kind rarely attempted anywhere, and one of only three known to have been constructed in America. This fact, which had been forgotten when Bagnall's book was published in 1893, was again brought to light only in 1963.

Then, a drawing made in the 1820's by Mary Jane Derby came into the possession of Daniel S. Wendel of Ipswich. It was unmistakably a northwest view across the Choate bridge, the name of which appears faintly in the left corner on a stone today still in its original place; but what could be the amazing tower which dominated the sky? Since Mary Jane Derby was an artist as literal as she was delightful, the truth of her report was not to be questioned. She had a taste for oddities in architecture and she must have drawn the mill precisely because it seemed to her as surprising as it does to us.

Mr. Wendel, the new owner of the drawing (and the rescuer, owner and inhabitant of the Ross Tavern nearly opposite the mill) soon found the answer. A drawing and description appearing in C. K. Skilton's *British Windmills and Watermills* (London, 1947), showed that the tower must be an horizontal mill very similar to the one built in Battersea, Surrey, by Captain Stephen Hooper for grinding linseed. Skilton says of the Battersea mill:

Its height, from the foundation, was 140 feet, and Hughson, in his *Circuit of London*, informs us that "the outer part consists of 96 shutters, 80 feet high and 9 inches broad, which by the pulling of a rope, open and shut in the manner of a Venetian blind. Inside, the

main shaft of the mill is the center of a large circle formed by the sails, which consist of 96 double planks, placed perpendicularly. The wind rushing through the openings of these shutters acts with great power upon the sails, and, when it blows fresh, turns the mill with prodigious rapidity; but this may be moderated in an instant by lessening the apertures between the shutters by the pulling of a rope. In this mill there are 6 pairs of stones.[15]

According to Skilton, Captain Hooper's mill (later called Fowler's) was not built until 1801; but Henry Wansey, as we shall see, knew of it in 1794. The date of 1788 which Rex Wailes, the English authority on windmills, assigns to it seems probable.[16] Captain Hooper had built an earlier horizontal mill on his own property in Margate, and was to build a later one at Sheerness, but as the drawings show, it was the Battersea mill which was the ancestor of Dr. Manning's mill.

How could Dr. Manning have learned of the Battersea mill? A diagram of it was first published in America between 1819 and 1824, in *Rees' Cyclopedia.*[17] The 1791 English edition of the *Cyclopedia,* the first to appear after the Battersea mill was in operation, gives no diagram or description of it, undoubtedly with the deliberate purpose of preventing imitation; and that was the last English edition for twenty years. The most likely possibility seems to be that some one of the British mechanics familiar with mills and with modern woolen manufacturing techniques, who came into this area after 1788 and not long before 1794, brought either in his pocket or in his memory the plans of the Battersea mill.

An entry in Henry Wansey's diary reenforces this possibility. He reported that in the summer of 1794 he was taken to see, in Charlestown, "a curious woolcard manufactory, worked by an horizontal airmill like that at Battersea, though not so large. Of this mechanical application they claim the invention."[18] That two unrelated copies of a mill built in Battersea in 1788, of a type rare in England and unknown in America, should, in 1794, be operating simultaneously in Massachusetts within thirty miles of each other is hard to believe. The chance seems overwhelming that Dr. Manning, who had no mechanical experience whatever, must have encountered the recently emigrated English mechanic who built the Charlestown mill and been helped by him, as Thomas Somers had helped the inexperienced Cabots with their machinery.

Since Somers himself had last been in England in 1786, before the Battersea mill had been built, it could not be he who brought over the news about it, though either he or someone trained under him could easily have built Dr. Manning's machinery.

Other possible supervisors of Dr. Manning's machinery, were the brilliant Yorkshire team, the brothers Arthur and John Scholfield, who were setting up a woolen manufactory at this very time in Byfield, which is about as far to the north of Ipswich as Beverly is to the south. They might even have been the nameless builders of the Charlestown horizontal mill which Wansey saw running a carding machine in 1794, and thus conceivably Dr. Manning's advisors for his mill. Bagnall tells us[19] that it was in May, 1763, that the Scholfields came to this country, and that it was in Charlestown that they first lived. Under the benevolent and fascinated observation of the Reverend Jedediah Morse, they hired a house in Charlestown and there built a hand loom and a spinning jenny of forty spindles. When in October, they sold the

first product of their loom—forty odd yards of broadcloth, Dr. Morse was convinced. He recommended them to a group of Newburyport merchants, headed by Wm. Bartlett, who were interested in starting a wool manufactory. Invited to Newburyport, the Scholfields by December, 1793, had built a carding machine in Lord Timothy Dexter's stable. The merchants, in their turn impressed, organized the Newburyport Woolen Manufactory, and hired the Scholfields to direct the construction of machinery for it.

Thus, all the winter of 1793 and spring of 1794, when Dr. Manning's mill and presumably his woolen machinery were being built, the Scholfields were directing the building of woolen machinery only twelve miles away. Their new mill, where the Parker river reaches tidewater, went into operation in October, 1794, only a few months after Dr. Manning's mill.

Since no evidence whatever connects the Scholfields with the horizontal mill in Charlestown or with that in Ipswich, however, one has no right to assume that they had a hand in either.

The summer day in 1794 when his mill at last began to operate must have been a great day for Dr. Manning. Southbound travelers by stagecoach, as they wound down steep and rocky Meetinghouse hill toward the Choate bridge, could hear the clatter of the huge vanes in the strange tower ahead of them, and see on the corner of the building which supported it the brave large sign

MASSACHUSETTS
WOOLLEN
MANUFACTORY

As the blankets, broadcloths and flannels came off his looms, bringing money and employment to Ipswich, Dr. Manning must have been delighted. Alas, his triumph was tragically short. Within a very few months, the venture began to falter.

One can readily find reasons why. The first disappointment must have been in the working of the windmill itself. To begin with the site was inauspicious, in an air pocket under a hill. Then, the lovely experiment of the horizontal mill, so much more exciting than conventional windmills, was itself doomed: let Rex Wailes speak:

> The horizontal windmill has falsely fascinated a large number of inventors, who could not realize its inherent inefficiency and its great defect, that of the weight of the whole rotating portion on a single footstep bearing at the base. All those that have had any real success have been little light things of low power.[20]

That Dr. Manning's windmill itself was almost immediately seen to be inefficient, and that it exercised its "false fascination" on still another American is revealed by an entry in Dr. Bentley's journal for September 12, 1795. Two years before, Bentley had heard "talk of using windmills for grinding bark in the Tan Yards,"[21] and indeed in July, 1793, Salem had granted to Nathaniel Richardson, tanner "a deed of land below the Common, for the accomodation of a windmill to grind bark."[22] There is no hint whether or not Richardson's was a conventional windmill, but the bark-grinding mill built by Joseph Chipman in 1795 literally next door to the Beverly Cotton Manufactory, was another Battersea-type experiment. Chipman, son of the Reverend John Chipman of North Beverly, had been for many years a prosperous pump-and-block-maker on a rather large scale in Salem, and had only

recently bought out his father's other heirs and returned to his birthplace, the handsome Conant-Chipman house within a few feet of the Beverly Cotton Manufactory.

Dr. Bentley tells us that he

> rode to Chipman's at Beverly. This Gentleman entertained us with his Tannery & particularly with his Horizontal Windmill which he is constructing to grind Bark. Possessing the resources of a good mechanic genius he is determined to repeat an experiment which has hitherto proved unsuccessful. He has made only one alteration as yet, & his works not being ready for trial, we knew not with what success. He observed that the Leeward Vanes trembled first, & that on the present construction they were not fixed to receive the air, & observing how ships trim to windward, he has made a model which receives all the wind which escapes through the windward vanes on the Leeward before it escapes, & so as to assist the motion. His Stone is less heavy than Richardson's in this Town. His gudgeons are brass. His vanes are supported by arms without braces.[23]

Since in 1795 the only two horizontal windmills of record in this country were the one in Charlestown and that in Ipswich, and Ipswich was closer to Beverly; and since the Manning and Chipman families were related by marriage, the chances seem large that it was Dr. Manning's "experiment" which after hardly a year of operation, Chipman already knew had "proved unsuccessful."

Still another reason for failure of the manufactory is suggested by the fact that within a very few months, the woolens were abandoned for cottons, which were easier to make. Even the goods made by the Hartford Woolen Manufactory, which had been running since 1788, were not able to compete with British goods; as the experienced Henry Wansey noted:

> The fabric was very poor, and hard in the spinning, and very badly dressed; and therefore very inferior to, and dearer than the British, loaded with all the expenses of freight, insurance, merchant's profit, and seven and a half per cent duty.[24]

The plaints of George Cabot, one of the leaders of the Beverly entrepreneurs, to Alexander Hamilton indicate what sort of obstacles Dr. Manning must have had to contend with. "Destitute of the necessary information ourselves" he wrote, "we were subject to be misled by every pretender to knowledge." The machines, "some intricate and others delicate," were experimental, and had constantly to be modified at great cost. When they were perfected, the designs were pirated and reproduced at a fraction of the original cost. The workers, laboriously trained, were hired away by other manufacturers.[25]

Even the incorporated manufactories, backed by groups of investors, found that their expenses exceeded all expectations. Henry Wansey says of the many American textile establishments he had visited:

> The general error of all their large undertakings has been, their laying out their capital in large buildings and on unnecessary stock of machinery which brings a heavy mortgage on the concern before they actually begin.[26]

Dr. Manning cannot have had much capital to sustain his enterprise. Probably several of his friends and neighbors invested in the manufactory, as John Heard had suggested they should, but it was never incorporated, and there is no hint of an organized group such as financed the Beverly and Byfield mills. Though his practice was excellent, and he had done much profitable buying and selling of land, he was far from rich.

One common trap which Wansey cites Dr. Manning did not fall into: "They also put the whole business under the

care of a chief workman (being ignorant themselves) who has no interest in an economical management of the concern."[27] Richard Manning was his father's superintendent; but since he was born in 1777, and therefore, only seventeen when the manufactory started, he cannot have been very experienced, however interested in "economical management."

Though Dr. Manning was at a loss in machinery and finance, he appears to have been very competent indeed in recruiting his labor force. His solution is characteristic of his Yankee talent for combining charity with profit: in fact, for serving both God and Manning. As he well knew, having been an overseer of the poor, it was the custom to farm out town paupers to the lowest bidder, with the understanding that the person who supported them should have the entire benefit of their labor. In April, 1795, he proposed that the town give him the use of a house and land and pay him £400 annually in £50 orders on the treasury. In return, he said,

I will undertake to provide for all such persons as are the proper subjects of the Town's support, they taking with them such Beds and Bedding &c as they have and will supply them with all Necessary Food and Cloathing and every kind of attendance both in sickness & in health.[28]

The Town agreed to furnish him with John Harris' house, and contracted with him for three years. They also agreed that if he should take in the poor of any other town, he should have the benefit of it. The fact that in January, 1796, the Legislature was paying bills presented by "Dr John Manning keeper of the Almshouse" indicates that he availed himself of this permission to carry out the plan he had proposed in 1788—and still further to augment his labor force. The contract was not renewed at the end of three years: perhaps by 1798 his manufactory no longer could offer employment to the town's twenty-eight poor.

In 1800, Dr. Manning's mill finally closed. The blinds were shut; the wheel braked; the great vanes rotated no more; and only the unregulated sighing of the wind through the shafting recalled the rushing clatter that had dominated Market Square for six years. Dr. Bentley, tirelessly voyaging around his county, spoke of Ipswich as "this decaying town." It continues, he said,

to neglect all its mercantile advantages. Not a vessel sails to any foreign port. . . . Some few persons are building, but the houses are too much neglected, & their mossy tops are more numerous than in any other part of New England. They have distinguished themselves, and they only wait for the angel of enterprise to descend into their waters & then all will probably step in & be cured.[29]

But Dr. Manning, an angel of enterprise if there ever was one, was to trouble the calm pool of Ipswich economic life no more. His energies were far from exhausted, however. Always concerned with Ipswich's schools, he joined several of his High Street neighbors in petitioning the town to set up a new school district there, which should have a share of town money. Failing to be set off as a separate district, in 1800 they hired a teacher and a room in a private house, and organized a school of their own. This school was so successful that they built a schoolhouse by voluntary contributions and Dr. Manning's subscription was more than half the whole sum raised. The town then supported the new school.

He continued for many years to own the mill building, lending part of the ground floor to his lawyer son, Joseph

Bolles Manning, and renting the rest. The machinery, but not the tower or the shafting, was taken out of the second floor. In this large room was to center the chief preoccupation of Dr. Manning's last score of years, a sort of blend of politics and religion. It was not of course to be expected that he would be orthodox in either. Ipswich around the turn of the century was overwhelmingly Federalist and Congregational; Dr. Manning was a Jeffersonian and first a Baptist then a Methodist.

His first recorded break with the Congregational Church was over their introduction of music. According to the Reverend T. F. Waters:

> On the first Sunday that the violin, flute and bass-viol appeared it is said that Dr. John Manning manifested his displeasure at the worldly innovation by leaving his pew, while the orchestra played, and taking dancing steps up and down the broad aisle, to the mortification of the elder worshipers but to the great delight of the youth and the lighter-minded.[30]

Dr. Manning was everywhere in the organization of the Baptists: he installed pews in the second floor of his old manufactory, and rented (or gave) it to them for a meetinghouse.

Though Captain Ammi Ruhamah Smith bought the south end of the mill building, convenient to his concession of the spring seining of shad and alewives by the bridge, and the north end, for a store, Dr. Manning continued to own the center, and the old manufactory room above. All these years the great windmill tower had squatted on the roof of Dr. Manning's building. It presented a double hazard; it was a serious menace to the worshipers beneath it, and an irresistible challenge to such of their young as remained unregenerate enough to shinny up its swaying heights. Mary Jane Derby's picture is believed to have been drawn in the 1820's. She had been born in 1807, so that she can hardly have become so expert sooner; and she went to Cincinnati to live in 1831. She must have been captivated by the sight of the strange tower, seen above the stone arches of the Choate bridge, the oldest in the country; and she must have driven over from Salem day after day to sit and sketch in the grass by the ancient Ross Tavern. Thus she gave us our only glimpse of the "falsely fascinating" horizontal windmills of Massachusetts in the mid-1790's.

Before the Methodist meetinghouse could be completed, in the fall of 1824, Dr. Manning died, insolvent. The deficit was not a large one, after payments had trickled in from his patients, and the remainder of the mill building had been sold to Ammi Smith. The Reverend T. F. Waters, surveying the Ipswich of 1837 through the advertisements in the newly established Ipswich Register, found many small businesses being conducted in what was now called the Smith building. Captain Smith himself not only lived there, but ran a store in which he sold fish and cord wood. Stephen Coburn kept a variety shop in the center, and a tiny post office; two doors north James L. Wells harness maker cleaned and repaired chairs and made fire buckets.

Offices now occupied the second floor, where the humming of the machinery and the harangues of ministers had so long been heard.

There is no record of when the windmill was finally taken down; presumably it was in the early 1830's, to judge from an undated drawing of about that time which shows it gone. In 1847, the building was bought, and thereafter bore the name of Stephen Coburn, who for thirty

years maintained a tiny post office at its center.

Some time in 1869, the old building burned to the ground. No hint of the charm, inventiveness and intelligence which Dr. Manning gave it clings to the ugly shapeless Caldwell block which at once replaced it, and survives.

Other monuments to Dr. Manning fared no better. His grave is unmarked. When the school that honored him and his family was taken down a few years ago, the cabinet which contained mementos of him was casually thrown away, and the name of the school changed. The Mannings as a family have vanished from Ipswich, and a mere street name bears witness to the century and a quarter of devotion they gave their native town. Mary Jane Derby's drawing, still fresh and wondering, comes as a needed reminder that Dr. Manning was not only a ministering angel, but an angel of enterprise.

NOTES

[1] Ipswich Town Meetings, 1779-1800, p. 480. (April 20, 1795.)

[2] The quotations which follow about Dr. Manning and smallpox are taken from an unpublished paper on the subject by the late Rev. T. F. Waters, by permission of his daughter, Mrs. R. E. Titcomb of Ipswich. For all background information in Ipswich, I have relied on Mr. Waters' exhaustive two-volume *Ipswich in the Massachusetts Bay Colony* (Ipswich, Mass., 1917).

[3] William H. Manning, *The Genealogical and Biographical History of the Manning Families of New England and Descendants* (Salem, Mass., 1902), p. 717.

[4] William R. Bagnall, *The Textile Industries of the United States* (Cambridge, Mass., 1893), p. 194.

[5] *Ibid.*, p. 12.

[6] *Ibid.*; and also "The Beverly Cotton Manufactory: Some New Light on an Early Cotton Mill," *Bulletin of the Business Historical Society*, Dec. 1952, pp. 218-242.

[7] *Ibid.*, p. 91. Petition dated Jan. 15, 1789.

[8] Reports of the Rev. Joseph Dana of Ipswich to Senator George Cabot, July, 1790 and Jan. 24, 1791.

[9] Bagnall, *op. cit.*, p. 194.

[10] *Ibid.*, p. 195.

[11] Town Meetings, p. 375.

[12] *Ibid.*, p. 363.

[13] Henry Wansey, *Journal of an Excursion to the United States of North America in the Summer of 1794* (Salisbury, England, 1798).

[14] Bagnall, *op. cit.*, p. 196.

[15] See p. 26.

[16] Rex Wailes, *The English Windmill* (London, 1954), pp. 84-85.

[17] Abraham Rees, *The Cyclopedia or Universal Dictionary of Arts Sciences and Literature* (Philadelphia).

[18] Wansey, *op. cit.*, p. 29.

[19] Bagnall, *op. cit.*, p. 203.

[20] Letter to the author, May 1, 1964.

[21] *The Diary of William Bentley, D.D.* (Salem, 1905-1914), II, 6. (Feb. 27, 1793.)

[22] Joseph B. Felt, *Annals of Salem*, p. 155.

[23] Bentley, *op. cit.*, II, 158. (Sept. 12, 1795.)

[24] Wansey, *op. cit.*, p. 60.

[25] Henry Cabot Lodge, *Life and Letters of George Cabot*, p. 44.

[26] Wansey, *op. cit.*, p. 85.

[27] *Ibid.*

[28] Ipswich Town Meetings, 1779-1800, p. 416. (April 13, 1795.)

[29] Bentley, *op. cit.*, II, 387. (Sept. 12, 1801.)

[30] Waters, *op. cit.*, II, 443.