THE AMES FAMILY

of

Easton, Massachusetts

BY

WINTHROP AMES

PRIVATELY PRINTED

1938

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Winthrop Ames

A QUITE UNNECESSARY PREFACE

THIS LITTLE BOOK (AND STILL, PERHAPS, TOO LONG AT that) has been written for my daughters, my brother and sister, and my favorite cousins, nephews and nieces of the Easton branch of the Ames family — and for them only. It is too personal a story to interest outsiders.

To the members of my own generation I make no excuse for it. We have grown old enough to learn that our forebears still live on in us; that we owe most of our qualities, aptitudes and weaknesses to them as truly as we do the color of our eyes or the shapes of our noses. They molded our characters by tradition and example. They speak to us daily from the fields they tilled, the shops, homes and memorials they built and the trees they planted.

But to the youngsters, now so eagerly peering forward into the future that they are impatient of things past, I shall also give this book. Some day when they come to realize that they too are only ancestors, leading their children by the hand, as their parents led them, into the brief spotlight we call life, and then bidding them good-bye as these children will again lead and bid good-bye to others, they may care to glance back at a few of the folk who marched before in the same endless procession.

One of my daughters came back from school the other day full of scorn for history because it was only about "old dead people fighting." I should agree, my dear, if by

"fighting" you mean merely military battles, most of which have left no durable result and only clogged the march of human progress. In the Ames story you will find no martial exploits, but you may discover some "old dead people" valiantly waging a more fruitful struggle — to make their own new land a better place to live in, and hand on to you a more sheltered lot and a reputable name. They cleared the wilderness that you might plant gardens. "And the moral of *that*, said the Duchess, is . . ."

Moreover, I think you will find the lives of these first Ameses reflect the early history of your country — its pioneer settlers and their brave hardihood, the war for independence, the birth and shaping of the first democracy, its sudden rise into a commercial world power, and its spread from the Atlantic seaboard across a continent.

Rereading what I have written I feel I may have included too much general history and repeated facts that everybody knows or would find better told elsewhere. But the records of the earlier Ameses are so meagre, often only the parish entry of a birth and a death, that my task was somewhat like that of Cuvier who tried to reconstruct a prehistoric animal from a single bone. To make any picture of their lives at all I was forced to fill in the contemporary background.

My main regret is that I have not been able to tell what might, perhaps, be the most moving and human part of our family story — that of the Ames wives. They made the homes, reared the many children, saved their husbands' money, encouraged their undertakings, and steadied them in failure and misfortune. But if we have scanty accounts of the men we have none of their wives. Until my grand-

mother began to keep a diary I find no record of the part played by any woman. Still, though I have been able to write nothing of them, I have felt their influence in every generation.

And now, with an apology for having talked so long beforehand, let me tell our family story as I see it.

W. A.

Queset House
North Easton, Mass.
1937

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APPENDIX

[The material for the Appendix was collected before the book was begun and was arranged by W. A., as here printed, during May 1937.]

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THE AMES NAME

IN GILBERT AND SULLIVAN'S OPERA 'THE MIKADO' POOH BAH boasts that he can trace his ancestry back to a "protoplasmal primordial atomic globule." If we Ameses could do likewise and follow our descent, step by step, from that microscopic bag of living jelly which the evolutionists tell us must have been our first progenitor what a magnificent line of forebears we should be able to parade! If every one of them had not been so alert as to escape accidents and avoid being devoured we shouldn't exist at all; and, for at least five million years, each single ancestor — whether protozoan, fish, reptile, bird, mammal, or prehistoric man — must have been sagacious enough to choose all the right evolutionary turnings and never make a mistake in matrimony. Otherwise we might today be oysters or ostriches, or exhibit our family skeletons as dinosaurs in some museum, instead of having attained the proud estate of *homo* more or less *sapiens* — and Ameses at that!

But, unless my naturalist cousin, Professor Oakes Ames, cares to undertake their history, I shall leave these noble progenitors still obscured in the primeval fog. We genealogists are tiresome enough as it is without adding an extra half billion years to our researches, so I content myself with picking up the family trail in England and in the thirteenth century where we find the first record of our name.

All surnames mean, or once meant, something. They were invented to avoid confusion when populations became congested, and first came into general use in England about the

time of the Norman Conquest. Usually they were coined from some nickname, like John (the) Little, taken from some trade, like Thomas (the) Smith, or indicated some place of abode, like William (from the) Wood.

The present Ames family in England preserves a tradition that we originally sprang from Hebrew stock and came into England either from Spain or Portugal — a tradition supported by two curious bits of evidence. The Jews in Europe early found it expedient, or were forced, to abandon the ancient tribal titles of their scriptures, and, like the people among whom they lived, take family names instead. An eleventh century Hebrew parchment, discovered at the Escorial in Spain, lists a number of such changes, and among them states, "Ames is Manasseh" — meaning that certain Israelites of the tribe of Manasseh had assumed the surname Ames. In Hebrew 'manasseh' means 'causing forgetfulness'; and 'ames' or 'ameth' (both pronounced with a lisp) means 'truth.' Further, during the reign of James I. the author of "Croyate's Crudities" writes that in Constantinople he was entertained by an English Jew, by name Ames, born in London of an English family long resident there. He was what we nowadays should call a banker, and had come to Constantinople for purposes of commerce.

On the other hand, the foremost authority on British surnames, Henry Harrison, believes that the family came to England from Amiens in France and took the name of their native city for an English surname — first as d'Amiens and later shortened into Amyas and Ames.

Both these surmises may be true. There may have been two stocks, one of Norman and one of Hebrew origin, both

of which happened to assume the same name. But whatever our original blood, whether French or Hebrew, it has been so commingled by residence and marriage in England for many generations that it must now be almost purely English. If any tincture of a Jewish strain remains I hope it may bequeath us something of the intellectual vigor and persistent ambition of that extraordinary race.

The early English form of the name was unquestionably Amyas, clipped in pronouncing it first to Amis and then to Ames. It is written Amyas in the text of a number of old wills and deeds, though they may be signed either Amyas or Amyce, Amys, Amis, Aimes or Ames. Respect for spelling is, however, a quite modern annoyance, and our forefathers were entirely careless how they spelled their surnames provided they indicated the sound. Even the literate Shakespeare, you will remember, wrote his in three different ways. In America Ames became the established spelling only during the second generation.

The first discovered mention of an individual bearing the name occurs in England in 1200, when a Richard Ames (or Amyas) was enrolled as a member of the Parliament held at Worcester by King John — a forerunner of the assembly which fifteen years later forced the Magna Carta. The second is a list of the heirs of a certain John Amyas who dwelt in Yorkshire in the reign of Edward I. His descendants were granted a coat of arms, described in the Appendix; and he may have been the ancestor of the various scattered Amyas and Ames families we find listed as holding lands in Norfolk, Suffolk, Kent, Lincolnshire, Shropshire and Somerset when written records became more common.

THREE AMESES OF BRUTON, ENGLAND

WE CAN TRACE THE UNBROKEN LINE OF DESCENT of our own branch of the family only back to a certain John Ames who died in the village of Bruton in Somersetshire, England, in 1560. He was undoubtedly akin to the families just mentioned, but how related we do not know. Nor do we know how long his forebears may have dwelt in Bruton before him, for the parish records were begun but six years prior to his death and give only the date of his burial. Our line follows his son, grandson and great-grandson, all of Bruton. If we assume he lived a life of the average length in his day, and so was born about 1520, our continuous family record from then till now (1937) spans four centuries and fifteen generations.

I like to imagine this first John Ames was born in 1520 for that year was one of great happenings in the world. Magellan was sailing the first voyage around the globe. Cortez in Peru was conquering a new world for Spain. Francis I. of France was vying on the Field of the Cloth of Gold with Henry VIII. of England. Still more important, as events turned, this same English Henry soon cast sheep's-eyes at a calculating little baggage named Anne Boleyn, and when the Pope refused him a divorce that he might marry her Henry roared out, "Pope! What do I care for the Pope?" and proclaimed England independent of the rule of Rome. Now release from this age-long authority meant liberty to

reinterpret religion, and led England first to revise her Catholicism, then to turn Protestant and finally resulted in that Puritan revolt against the newly established Anglican Church which sped the 'Mayflower' to America and brought our forebears in her wake. All these things would doubtless have come to pass eventually, but it is probable that they were set forward at least a century by Henry's chance infatuation for a chit of nineteen when our first John Ames was a growing lad in Bruton.

Bruton is still a secluded little hamlet about one hundred miles southwest of London and half way between the Bristol and English Channels. Transatlantic travellers who land at Plymouth pass near it on their way to the metropolis, though it is off the railroad. Its population today is less than two thousand, and never seems to have been much more.

It lies in a region of historic interest. The Roman conquerors of Britain discovered mineral springs at Bath, twenty-five miles away, and built a town there with temples and villas. When the Roman legions were recalled to fight the Goths and Vandals who were invading Italy, pirates from Denmark found the Bristol Channel a convenient landing place, and the Saxons waged many battles with them near Bruton. The first Christian missionary to Britain, St. Joseph of Arimathaea, is supposed to have brought the Holy Grail with him and to have buried it at Glastonbury, thirteen miles away, and marked the spot with his staff which blossomed and became a tree. Glastonbury, then called Avalon, is also the legendary burial place of King Arthur of the Round Table.

After William the Conqueror had subjugated England

he rewarded his henchmen by apportioning the best lands among them, and gave the demesnes of Bruton to a Norman baron. If, as Harrison supposes, the Ames name was originally d'Amiens, and so signifies our forebears came from that city, it may be that they followed the Conqueror out of France.

The first historical account of Bruton dates from 1533, when Henry VIII. commissioned one John Leland as 'King's Antiquary' to travel through England and record his observations. Leland visited Bruton during the lifetime of our first John Ames, and therefore describes the village as John knew it. Here is the report — and in Leland's own spelling:

"Brewton lyeth at this side of the Brywe river. There is a street yn it from north to south, and another from est to west. Al the town now standeth by the making of clothe. The Abbay stands beyond the river hard over a bridge of stone. The Abbay there was afore the Conquest, a place of monkes founded by Algarus, Erle of Cornewal. One William Gilbert of later time, beying prior of Brewton, went to Rome and their procured that the priory might be chaungid ynto an Abbay, and did at great cost yn building almost re-edify it. There is yn the market place a new Crosse of 6 arches and a pillar yn the middle for market folkes to stand on, begon by Ely, laste abbate of Brewton."

The ancient Abbey — a monastery of the Augustine Order — was then, of course, the town's principal edifice. Though William the Conqueror confiscated private lands he was too good a churchman to despoil the religious establishments. On the contrary he fostered them; and down to the time of Edward I. the pious fervor of the rich and the

nobles greatly increased their possessions, for a gift to them was deemed a "gift to God and his saints." Beside giving employment to the local peasantry in husbanding the Church fields, these monasteries, or abbeys, were local centers of learning and charity. The monks copied ancient books and kept records of historical events. The rich sent their sons to them to be educated. They lodged travellers, treated the sick and doled out alms to the poor. They were therefore well liked by the people in spite of their great holdings, and when Henry VIII. confiscated their properties he was obliged to placate popular opinion by giving out that it would so enrich the royal treasury that commoners would be relieved of all taxes and services — a promise which, like most astute politicians, he conveniently forgot. It was probably with regret, therefore, that John Ames and his fellow villagers saw their Abbey closed in 1539, and said good-bye to its monks, turned adrift to become alms seekers instead of alms givers.

The market cross was an important gathering place. On market day the town square would be lined with the booths of peddlers and carts laden with local produce, and the neighborhood flocked there to trade, drink, play games and discuss all matters, trivial and important. Under the stone canopy of the cross sellers auctioned their wares and heralds from London proclaimed the royal decrees and messages. Anyone who had news told it here, and there was speech-making — not always of the most submissive kind. With no postoffices or newspapers such market gatherings were the chief means of spreading information and forming public opinion.

Of the cross and of the ancient Abbey no traces now remain. As the present parish church with its lofty bell-tower — a fine specimen of Somersetshire Gothic — was begun after the closing of the Abbey and probably finished during the reign of Edward VI., John Ames may have had a hand in building it. His son certainly saw young Prince Charles, later Charles I., when he came there in 1620 to attend a service. This church now contains a stained-glass window, given in 1888 by Frederick Lothrop Ames of Easton to commemorate our Bruton forebears.

Leland's remark that "al the town now standeth by the making of clothe" has an interesting background. England was originally populated mainly by small farmers who owned a few acres as yeomen or, as tenants, leased their fields from some noble lord. Livestock was pastured on the village 'common' — an enclosure set apart by the landowners for the joint use of all. (The custom was transplanted to America, and the Common in Boston and a part of New York's Central Park were originally public grazing grounds.) But when a great demand for English wool to be woven into cloth developed on the Continent the export of wool became England's chief source of wealth. The 'woolsack' on which her Lord Chancellor sits to this day is a reminder of it, just as the 'sacred codfish' which hangs in Boston's State House reminds us of New England's first resource. When the landlords found it was more profitable to graze sheep than to raise crops they turned their leased farms into pastures and little by little encroached upon the commons. But a few men can tend many sheep; and as England had not yet developed manufactures there was great distress among the

agricultural classes. They rose in revolt again and again, but seemed powerless against the landowners. In an effort to relieve unemployment Edward III. brought weavers from Flanders and scattered them throughout England to teach his own people to make cloth. The trade flourished in those parts best adapted for sheep raising like the region about Bruton; and when Leland wrote the town was dependent on that industry. But this should call up no picture of a busy factory. Each weaver bought wool from his landlord, toiled at a noisy footloom in his own home and was paid by the 'ell' for what cloth he could turn out. So healthy open-air farming became a secondary occupation, and it may be that our Bruton ancestors grew stoop-shouldered over their looms in cramped and smoky cottages.

But we can only speculate about what they worked at or what their circumstances were. They may have had some other trade. They may have been yeomen farmers and owned land, or leased it as tenants. They may have been poor or in comfortable circumstances. From the bare statements in the parish record we know only that they were born, married, bore children and died in the little hamlet.

During the lifetime of our first John Ames some citizens of Bruton who had gone to London and prospered bought a dwelling house in the town and, "of their charity and well meaning," endowed it with a gift of land as a 'Free Grammar Schole' where the village youths might learn to read and write. But it was not free as we understand the term for the pupils were taught at their own expense, or, as the deed runs, "their proper costs and charges." It was free only in the sense of being open to all Bruton lads, com-

moners or nobles, who could pay, like the first schools established in New England where pupils were expected to contribute provisions or firewood toward the teacher's stipend. Perhaps the Bruton Ameses could not afford an education; perhaps they felt it an unnecessary accomplishment since at that time only one Englishman in forty could read or write. Some of them may have attended the little school, but not all, for of the two brothers who came from Bruton to America one signed a legal document by making his mark.

I imagine our first John Ames must have been a tolerably respectable person since his wife allowed both his son and grandson to be named after him; and with these three confusing Johns to deal with I shall, for clearness, call the father John the first, his son John second and his grandson John the third.

News of all important happenings surely reached them in the Bruton market place. Both the first and second Johns must soon have realized why their new queen, Henry VIII's daughter, deserved the title "Bloody Mary" when she tried to turn the kingdom Catholic again, and burned three hundred Protestant "heretics" at the stake during one year. They probably rejoiced when her tolerant sister, Elizabeth, succeeded to the throne; and both may have stood at some thronged roadside and seen that rouged and red-haired lady ride by on her white stallion or carried past in a litter for she was fond of showing herself to her adoring subjects and made royal "progresses" through all parts of her realm.

John the third lived to be nearly seventy. He was twenty-four when Sir Walter Raleigh planted the earliest English

settlement in America at Roanoke, reported the region as fair and fertile, named it Virginia in compliment to the virgin queen and brought back that strange gift, tobacco. Mary Queen of Scots was beheaded when he was twenty-seven; and a year later in consequence the Spanish Armada threatened the coasts of England only to retreat out of the Channel and be wrecked off Ireland. He was in his forties when James I. was crowned, and the first permanent American colony was planted at Jamestown. I like to believe — and it is quite possible — that this third John, hearing that stage players from London were barnstorming in the neighborhood, perhaps at the then flourishing port of Bristol, stood in some inn yard and saw Shakespeare act, though he may not have noticed him particularly for Shakespeare was accounted a mediocre actor. He heard the King James translation of our English Bible first read from the village pulpit. When he was sixty he must have learned that a band of Puritans had sailed away from old Plymouth in a crowded little craft, the 'Mayflower,' and come to land on the rocky shore of New England.

WILLIAM AND JOHN AMES COME TO NEW ENGLAND

SIX YEARS AFTER JOHN THE THIRD DIED TWO OF HIS SONS, William and John (we are now in the fourth generation), determined to follow the Pilgrim ship across the sea, and brought our family to America. William was thirty and John thirty-five; and the reasons which led these two grown men to break all ties with home and adventure a new life in a land still almost a wilderness were probably both economic and religious. Charles I. had been on the throne ten years, and under him conditions in England were most distressful. She was so over-populated that John Winthrop wrote, as one reason for his own emigration, "here man, the most precious of all creatures, is held more vile and base than the earth we tread upon, and it is come to pass that children, especially if they be poor, are counted the greatest burdens, which would be the chiefest earthly blessings if things were more right." Small scale agriculture, which makes for a contented people, languished. No one who did not already own land could acquire it, and Englishmen have always coveted their own acres. Foreign wars raised the costs of living and injured the trades, especially that of cloth-making, and there was great unemployment.

Charles seemed bent to make things not more but less right, and was at odds with his subjects from the first.

They had come to question the 'divine right' of kings to govern merely according to their whims, and now held that a monarch should feel some responsibility for the welfare and wishes of his subjects — a doctrine which Charles, like his predecessor James, rejected as wholly newfangled and absurd. So when Parliament refused to vote money to be muddled away on abortive foreign wars with which the English thought they had no concern, Charles curtly dismissed them, quartered hordes of unpaid and often ruffian soldiers on the common people as unwilling hosts, and imposed forced loans and taxes of his own devising which were bitterly resisted. Indeed, our American Revolutionary slogan, "no taxation without representation," was but a later echo of these protests. Altogether Charles soon managed to so embroil himself with his people as to make the civil war which was to cost him his head loom as inevitable. These were miserable times for all except the great landlords or court favorites; and no one of the middle or lower classes could foresee any hope of bettering his condition.

On the other hand, letters from the colonies in New England began to promise not only independence but opportunity there. Plymouth had now been settled for fifteen years and Boston five, other little villages were springing up along the seaboard, and after the first difficult times the Colonists had begun in a small way to prosper. Timber cleared from their farms, salted fish and furs trapped or traded from the Indians were already finding markets in Europe; and, above all, land could be had in unlimited quantities and almost for the asking. Conditions were still

rude and life laborious, but a hardy and ambitious man might be his own master and thrive as well. Indeed, it is amusing to learn from letters of the early settlers that a chief complaint against their new home was neither its climate, hardships, wolves nor Indians, but an unexpected pest, the mosquito.

But if William and John Ames were drawn to America by the promise of better prospects their religion must have been an equal, if not a more powerful, motive. They were undoubtedly 'dissenters,' and considered the forms and ceremonies of the established English church a Popish inheritance and contrary to the teachings of the Bible. Most of those who left England at this time came to Virginia, Maryland or the West Indies where land was more fertile, life easier, and it mattered little what faith a man held; but William and John chose cold and barren Massachusetts where only those of the Puritan faith were welcome. Instead of leaving from the convenient port of Bristol near Bruton they journeyed across England to join and sail with a small band of other dissenters from Kent. Finally, as soon as possible after reaching America they made public profession of their faith by becoming members of the Calvinist Church, though only one quarter of the other Colonists at this time did so. It may be, too, that they were influenced by the writings of a famous relative, William Ames, Doctor of Divinity, then exiled in Holland, whose tracts, smuggled into England, were the most influential religious writings of the time. I shall have more to say of him later.

If King Charles made England an unhappy place to live in for others he made it doubly hard for dissenters. The

Church was linked with the State, and a refusal to accept its ritual was considered not merely a matter of religious opinion but a denial of the authority of the Crown itself. So Charles resolved to "harry dissenters out of the land." Their preachers were silenced, their meetings forbidden and no non-conformist might hold office of any sort.

Therefore, because of economic distress and religious persecution at home and the hope of more freedom and better opportunities abroad, a great exodus of Englishmen, both the pious and those merely adventurous, began about 1633 and continued for nine years till the outbreak of Cromwell's Civil War. Historians call it 'the great migration.' Small vessels began to ply across the Atlantic in increasing numbers, taking out settlers and returning with American produce. Colonizing companies found it profitable to encourage emigrants by advancing money for their passage and equipment, for these loans were quickly repaid and the settlers set up a brisk demand for English goods.

William and John Ames sailed in 1635, when this exodus was at its height. How long before they had left Bruton to join the shipmates with whom they made the voyage we do not know. Their father had been dead six years and it may have taken them some time to divide his property (if he had any) with the sister and brother they left behind. Others of the Ames name, probably descendants of this brother, continued to live on in the village for nearly two hundred years, and some of these who died between 1759 and 1805 were of sufficient local importance to be buried under memorial tablets in the little chapel of Wyke Champfleur which stands just outside the town.

Their Voyage on the 'Hercules'

We are certain that John Ames sailed on the ship 'Hercules' from the port of Sandwich in the latter part of March, 1635, for two fellow passengers, Samuel Hinckley and Thomas Hayward, said that he came with them. They did not mention William, but this is not remarkable since both had special reasons to speak of John. Hayward became his lifelong neighbor, and John later married Hayward's sister whom he met on the voyage, and their marriage was performed by Hinckley's son, then Governor of Plymouth. Neither William nor John is listed among the twenty-four passengers who got their permits to sail at Sandwich, but all these were residents of Kent County, and there were seventy-eight others on board. It seems so likely that the brothers journeyed together, if only for companionship and for economy in sharing the necessary outfit, that, as there is no evidence to the contrary, I assume William was also on the 'Hercules.'

We know pretty well what their voyage must have been like for there are several accounts of contemporary crossings. They would have learned, or, as Peter Higginson advised from Boston, been "strongly instructed what things to bring with you for your more comfortable passage at sea and also for your husbandry when you come to land. For once parted with England you shall meete with neither markets nor fayres to buy what you want." Letters from America listed the equipment every pioneer settler should provide. After landing he would need cooking utensils, wooden, or sometimes pewter, dishes, knives and spoons

(forks were a new and unnecessary refinement), bed and table linen and warm mats to sleep under. A year's outfit of clothing was recommended with extra clothes and leather to make more. All possible tools were indispensable, especially axes and saws, together with farm implements (shovels included), wheels to build a cart and wheelbarrow, a lantern and iron to make nails, hinges, etc. Each man should have a 'long-piece,' or musket, with powder and shot for hunting and defense, a sword, and, as a protection against Indian arrows, a heavily wadded surtout or an armoured breastplate. Fish and game were abundant in the new land, and he could later grow Indian corn and vegetables; but the prudent man ought to provide for his immediate needs by taking out a considerable store of oatmeal, flour, dried peas, oil and vinegar, spirits and malt to brew beer.

Notice there is no mention of furniture. Space in the early ships was too valuable to waste on anything that could be made after landing; and, with the exception perhaps of a child's cradle for use on shipboard or a carved chest brought along as a packing box for the family linen, the first-comers carpentered their own tables, benches, stools and beds. The heirlooms supposed to have cumbered the 'Mayflower' must prove their pedigrees; though, of course, many valuable pieces were imported later.

For the voyage each passenger provided his own bedding, table dishes and frying pans and skillets for cooking private messes. He also had to supply all such condiments as sugar, pepper, oil, vinegar, etc. Wine and spirits were found comforting in seasickness. He was urged to bring fresh vegetables, eggs and dried fruits to vary the ship's fare as long

as possible. Above all, plenty of bottled lemon juice was essential to prevent scurvy from the stale diet.

William and John Ames must, therefore, have got together some such equipment; and, standing on the wharf in Sandwich, clad, as advised, in their "oldest and warmest garments for the sea," have watched their possessions stowed away in the hold of the 'Hercules' under the supervision of its captain, John Witherley, master mariner. The cost of such an outfit averaged £30 per person with £5 more for the passage. As money was then worth three times what it is today this represents the not inconsiderable outlay of some five hundred dollars.

The 'Hercules' was a square-rigged little craft of two hundred tons burthen (hardly larger than the 'Mayflower') manned by a crew of twenty-five and armed with cannon against pirates and privateers; though ships bound for New England at this time carried too little of value to be often molested. Most of the space on the open upper deck was filled with pens of farm animals for breeding. The quarters below for the one hundred and five passengers aboard consisted of two common cabins, one for men and one for women and children, both so low that a tall man could hardly stand upright in them. Here they slept, some on mats on the floor, others in hammocks slung above; and here, on stormy days at least, they ate. The only privacy was a curtained alcove or two for women in childbirth, and the like. In spells of rough weather when the hatches were battened down the air and the seasickness must have been dreadful. One captain, convinced that seasickness was due to lack of exercise, ordered his passengers on deck, made

them cling to a rope stretched between the masts and jump up and down till they had "warmed their blood" — though with what results he does not say.

The ship furnished rations consisting mainly of salted beef, pork and fish, hard-tack, oatmeal, dried peas, cheese and thin beer. The meat was towed alongside on a line till somewhat freshened and then stewed up with a limited allowance of storage vegetables. Off the Newfoundland Banks passengers fished for cod and sometimes nearer land caught mackerel. Then, as one wrote, "we fed our bodies sweetly on the fresh fish." The average voyage at this season lasted from six to nine weeks, but in case of continued head winds and stormy seas all vessels took provisions for three months. Some passages were wholesome enough, but on others many were so weakened by sickness and the diet that they were feeble for some time after landing.

It is interesting to compare this voyage, three hundred and two years ago, with the luxury of a transatlantic trip today; and as I write it happens that my cousin, another John Ames, the eight times great-grandson of our emigrating ancestor, has just crossed on the 'Queen Mary,' the swiftest and largest liner now afloat, though a swifter and larger one may already be on the stocks. In tonnage the 'Queen Mary' is four hundred times the size of the 'Hercules,' and the latter, with all sails set, might stand with room to spare inside the 'Queen Mary's' main dining-saloon. Here, says my cousin, nearly eight hundred first cabin nabobs sat down in full dress and jewels at individual tables to epicurean dinners cooked to their special order by French chefs, and then retired to digest them in air-conditioned suites with

private baths and bedside telephones through which they might talk to friends at home or in any foreign land. The four day trip was hardly long enough for an exploring voyager to tread the ship's ten miles of carpet, ride in her twenty elevators or visit her twenty-one public rooms. The nineteen hundred passengers, waited on by twelve hundred stewards and crew amused themselves with talking-pictures, radio broadcasts from all countries, dancing, concerts, libraries and beauty parlors, and might buy everything from gems to gimcracks in the shops aboard. They could "warm their blood" in gymnasiums, squash, racquet and tennis courts, swimming pools or Turkish baths. Even their pampered dogs had an 80-foot exercising run — larger than any deck space on the 'Hercules.'

The 'Hercules' probably first sighted land toward the lower end of Maine, for ships from England then took a more northerly course than they do now, and the sea-weary passengers crowded against her rail to watch the shore as the little craft skirted down toward Boston. William and John Ames must have wondered at the immense extent of forest compared with England, and the rare sign of any human habitation except for an occasional fisherman's hut perched here and there upon the rocks. But they sometimes saw open meadows, green with May, which the Indians had cleared for cornfields by girdling the trees and then burning the stumps and underbrush. Many of these clearings were abandoned, for shortly before the coming of the 'May-flower' a mysterious plague had killed off about half the savage population. This the Pilgrims took to be a special dispensation of Providence in their favor. They would.

EARLY CONDITIONS IN BRAINTREE AND BRIDGEWATER

FOR SEVERAL YEARS AFTER WILLIAM AND JOHN AMES landed we have no record of where they lived or what they did. They were country bred, and John's bent was obviously toward farming, so perhaps even the five year old town of Boston, with its busy port and row of little shops along the waterfront, may have seemed already too urban to attract them. At any rate, we next find both in pioneer settlements; William in Old Braintree, now a part of Quincy, in 1638, and John, two years later, in Duxbury.

They arrived at an economically unpropitious time for newcomers. The total white population of Massachusetts Colony was then between four and five thousand, but during the next half dozen years the 'great migration' poured more than two thousand immigrants into New England annually, and the established settlers took advantage of the flood to charge exorbitant prices for such necessities as provisions, livestock, and timber for dwellings. On the other hand, skilled labor was at a premium, and single men like the Ameses could have found no lack of occupation. They did not need houses of their own yet — homes were not built until wives were got to keep them — and probably lodged with some neighbor who could spare an attic bed in return for services. But in new settlements the houses were often overcrowded; and entire families were sometimes forced to

spend their first winter in a kind of dug-out niched into a bank or hillside, or in a hive-like wigwam made, Indian fashion, of saplings stuck into the ground, bent together over the top, and then covered with bark and clay or mats and sail-cloths. "These," writes old Edward Johnson, who came two years after the Ames brothers, "kept off the short showers, but the long rains and snows penetrated through to their disturbance in the night season; yet in these poor shelters they praise and pray their God till they can provide homes, and the earth, by the Lord's blessing, brings forth bread to feed them and their wives and little ones."

But such primitive conditions did not continue long even in the sparsest settlements. There were among the Colonists workmen skilled in all trades who had brought tools from England. It is doubtful, for example, if log cabins were built even by the first-comers. A saw-mill driven by water speedily followed the grist-mill in every community; and the earliest houses were framed, clapboarded, and had thatched or shingled roofs, though the windows were small and filled with oiled paper until glass in diamond-shaped panes could be got from home. When a house frame had been hewn out the neighbors were called together for a 'raising' and set it up.

Dwellings were usually near streams or ponds, for wells were dug only after all good waterside sites had been occupied. The house which, when he married, William Ames built in Braintree was on Town Brook; his brother John's stood near Town River in Bridgewater. They were both undoubtedly of the early type — one large single room on the ground floor with an attic, reached by a ladder or steep

staircase, under the pitched roof above. The indoor life of the family was spent in the lower chamber which served as kitchen, workshop and bedroom, and centered about the great hearth where a wood fire, banked with ashes at night, burned the year round. If it went out it had to be laboriously rekindled with flint and steel, or a child sent, perhaps through snow-drifts, to borrow a pan of embers from some neighbor. The great back log was often so heavy that it took several persons to drag it into the house; but the comfort of such generous fires must have been greatly appreciated by the Ameses who had shivered over the small grates in England where fuel was scarce and dear.

Houses were scantily furnished, and the plain stools, benches, tables, chairs and beds were of home carpentry. The high bedstead of the parents stood in one corner; babies slept in a low trundle-bed that could be slid beneath it. Older children climbed the ladder to mattresses in the attic; and sometimes started gossip by tales of what they had spied through knot-holes in the floor. As the family increased ells or lean-tos were built out from the central room.

After fields had been cleared and gardens planted food was plentiful enough though it lacked much variety. For nearly a century the usual morning and evening meals were Indian corn-mush and milk, or hominy flavored with salt pork. Fresh meat was a luxury, for oxen were kept for draft, cows for milk and sheep for wool. Sea fish were caught in Braintree and herring ran up Town River in Bridgewater. Of game there was a superfluity. "Venison," wrote one settler, "is so plentiful that the Indians kill them for the

skins only, and often hang the carcasses to rot on a tree. Partridges I am cloyed with, we catch them by the hundreds. In the fall of the leaf wild turkeys are easy to be shot at." The gardens, beside peas and beans, supplied such vegetables as squashes, turnips, onions, carrots, and a much appreciated novelty, the Indian 'pumpion' or pumpkin. Potatoes were not grown at first.

Water was boiled and stews made in kettles hung on cranes over the hearth. Meats were roasted on turning spits. Every fireplace had its oven, a compartment in one side of the chimney heated by live coals which were then swept out and bread and cakes baked on the hot bricks.

Table utensils were knives, horn or wooden spoons and, principally, fingers. Forks did not come into general use till the end of the century (Governor Winthrop in Boston had one which he kept in a case, but he showed it oftener than he used it) so naturally the family supply of napkins had to be large. Pewter plates were imported but expensive; and in most early households, even those of the Colonial governors, trenchers — maple platters, hollowed out like soup plates and each used by two persons — served instead.

Few Englishmen of that day had much liking for plain water, and home-brewed ale was the favorite drink, or, when the apple trees were old enough to bear, hard cider. Tea was first brought into England the year William and John left, and sold for what would now amount to nearly two hundred dollars a pound; and coffee was not known in Europe till five years later. Pipe smoking and snuff-taking were common habits with both men and women; and, taught by the Indians, they grew their own tobacco.

There were few looms or weavers, and all except the coarsest homespun cloth came from England. For working garments the men often wore jerkins and breeches of home-tanned deerskin. Cowhide shoes with wooden heels were also made at home; or, if they were bought, even vain young girls would walk barefoot to meeting to spare them and put them on only at the church door. Smocks were worn in the fields, and leather aprons by the artizans. One Braintree man excused keeping his apron on in meeting by pleading that he felt naked without it.

The type of dress we know from pictures as the Puritan garb changed little for half a century, though some ladies of fashion in Boston followed, as far as they were able, the London modes, and were, in consequence, soundly berated as Jezebels by the parsons. But clothes were by no means always drab. Women wore vivid blues, greens, purples and even orange and scarlet, and the men bright colored stockings and kerchiefs. It was considered immodest for a woman to show her hair in public, and even girl children covered their heads with caps. A special law prohibited any female from wearing sleeves wide enough to allow the glimpse of a bare arm.

The observance of the Sabbath was based on Hebraic precepts. It began at sundown on Saturday, and from then till Monday no work not absolutely necessary, such as feeding and watering cattle, was allowed. Victuals were eaten cold. No books might be read except the Bible or sermons. Anything resembling recreation was strictly forbidden; even walking abroad for pleasure was taboo. If a traveller chanced to be overtaken in the forest by nightfall

he might proceed only to the nearest shelter. Church-going was obligatory. If there was no church in a settlement everyone must journey to the nearest — a hardship, especially in winter, which made each village hasten to provide a local preacher. Services were held both morning and afternoon. Sermons were often four hours long, and some clergymen were known to pray extempore till the sand ran through an hour-glass. Children were expected to sit upright on hard benches and be as still as mice. If they or their elders dozed a 'tithing man' would wake them with a squirrel's tail tied to a long pole. Churches were not warmed, and people took heated bricks or stones with them as foot warmers. Instrumental music was considered papish, but the congregations sang psalms under a 'tuner' who set the pitch and 'gave out' the first line. Of the paramount influence of religion and the clergy I shall speak later.

Life was laborious and there was little leisure for amusements. When a house frame was raised the owner was expected to provide a neighborhood feast with plenty of liquor; and on special occasions like a church-raising the results were often far from sanctified. Gathering in taverns was frowned upon; but the men played bowls on the village green, and vied in wrestling matches, and there were champion wrestlers in the Ames family down to my grandfather's day. The women held quilting bees, and both sexes joined in corn-huskings and psalm sings. Evening gatherings were set at 'candle-lighting,' for the sun was the clock, and when a man could step on the head of his shadow it was noon and time for dinner.

Rural Colonists were necessarily good riders for, except

shanks'-mare, horses were their only means of land transportation. They travelled astonishing distances in the saddle, loosing the animal to graze in any convenient pasture on the way; and devised a method, called 'ride and tie,' of making one steed serve two riders. The first would ride on ahead for a certain distance, then tether the horse to rest by the roadside while he walked forward. When the second traveller, who had followed on foot, reached the horse he would mount, ride past his companion, again rest the animal, and so on.

The first roads were merely Indian trails with the overhanging branches trimmed up so that a man on horseback might ride through. Later they were widened for carts and sleighs. In winter they were often impassable for days together; and after a heavy snow-fall one Bridgewater settler who lived somewhat remote from the village lay dead in his house for nearly a week before his family could summon the neighbors.

Children were brought up rigorously. Idleness was a sin, and they were set at household tasks or work in the fields as soon as they were strong enough. When guests were present at a meal youngsters were expected to stand silent in the room till it was over before taking their places at table. One clergyman thus instructed them in proper table manners: "Never sit till asked. Ask for nothing, tarry till it be offered thee. Take salt only with a clean knife, dip not thy meat in it. Look not earnestly at any that is eating. If any speak to thee stand up to answer. Otherwise talk not, hum not, snigger not, wriggle not. Spit nowhere in the room but in the corner."

For at least thirty years after William and John Ames landed there were no schools in the country towns. Mothers, when they were able, might teach their sons to read, using the family Bible as a primer, or a prosperous father pay the local parson to instruct them in the 'three R's'; but the book-learning of girls was almost totally neglected. Even after every village of fifty households was supposed by law to provide a schoolmaster there was much to-do as to whether girls should be sent to him; and one irate remonstrant declared in town meeting that things would come to a pretty pass should females be able to humiliate their menfolk by looking over their shoulders to correct their spelling. Indeed the whole first generation born in the Colonies were, in general, much more poorly educated than their parents who had been taught in England.

A man who practised a trade, like William Ames in Braintree, had to farm as well and grow his own victuals; and a farmer, like John in Bridgewater, needed to be a jack of all trades, for almost everything eaten, worn, or used by the household must be produced on the farm. He was his own carpenter, mason, butcher, tanner and carrier. Whatever he could not raise or make he paid for by barter with cut timber, livestock or corn. Money scarcely circulated at all outside the port towns, and corn (its changing value agreed upon from time to time in town meetings) was the recognized medium of exchange, and known as 'country pay.'

Women's work was equally varied and laborious. They spun yarns from wool or flax on a wheel, dyed them and knitted them into garments. They dipped tallow candles, made soap, brewed ale, dried vegetables, salted meat for

winter use and helped in the fields at harvest time. They nursed the sick and acted as midwives. All the daily tasks of cooking, housekeeping, clothes making and baby tending had to be done without running water, electric light, sewing machines or canned food. Of course shops or markets were, in the country, either non-existent or remote.

Such were the general conditions under which William Ames lived in Braintree, and John Ames in Duxbury and later in Bridgewater; and they altered little during the lifetime of the following generation.

WILLIAM AMES OF OLD BRAINTREE

AS I HAVE SAID, WE DO NOT KNOW WHERE WILLIAM lived or what he did for three years after landing. He was an iron-worker and had probably learned his trade in England, for he was thirty when he reached America, and a man of that age who did not already have some special occupation would probably turn farmer where land was almost free.

I call him 'iron-worker' instead of blacksmith, for nowadays, when machines have so completely supplanted hand work, we think of blacksmiths mainly as shoers of horses — indeed I am told they no longer make the horseshoes they fit. But in William's time the well-trained smith was a highly expert craftsman. He could smelt his own iron from bog-ore, and cast such massive pieces as cannon and anchors, or forge the delicately wrought grilles and railings that ornament the finer Colonial houses. With hammer and anvil only he made tools for all trades, and elaborate locks, latches, hinges and chains. When need arose he was able (as William's great-great-grandson proved) to turn out without machinery such intricate pieces of mechanism as the flint-lock musket. Indeed, skilled blacksmiths were so needed in the early settlements that towns sometimes offered them special privileges or free grants of land.

We find William first mentioned in 1638 as living in Old Braintree, Massachusetts. The following year he married a

Braintree girl named Hannah (her family name is not recorded) who must have been considerably younger for she outlived him almost sixty years. No trace of the house he built remains; but an old survey shows that it stood close to the town stockade and first corn mill on Town Brook in that part of Old Braintree which is now Quincy Adams, and near the present Fort Square. This was only a mile and a half from Wollaston where, ten years before, convivial Thomas Morton and his followers had set up a May-pole at Merry Mount, and so scandalized the Puritans by "drinking and dancing about it many days together, inviting the Indian women for their consorts, and frisking together like so many fairys or furies" and in general reviving the "beastly practices of the mad Bacchanalians," that they were expelled from the Colony.

William may have come to Braintree because an excellent quality of bog-iron ore had been discovered in the swamps there; and it was this ore that led to the establishment of the first plant set up in America for smelting and casting iron. It is a family tradition, which there is no reason to doubt, that William was connected with these works, though we do not know in what capacity.

The promoter of the enterprise was John Winthrop, junior, son of the Governor of the Colony — a young man of an enquiring mind who had a scientific education unusual for his time. He was especially interested in developing the natural resources of New England, and attempted, unsuccessfully, to make salt from sea water, and mine graphite with which the Indians painted their faces, and which he hoped Spanish ladies might find useful as a black hair-dye.

To import iron was expensive, and Winthrop realized the need of a homemade product. He made a wide search for deposits of bog-ore, and found them in Braintree (where William Ames had now been living for three years) and at Saugus, near Lynn. He took specimens back to England to be smelted, and records in his diary that "good iron was made from that of Braintree"; adding, "Braintree was, in my thoughts, the fittest place for the first setting up of an iron-worke." The project seemed promising, and Winthrop persuaded a group of English capitalists to subscribe £15,000 for building smelters and preliminary operations; or, as Edward Johnson in his 'Wonder Working Providence' more quaintly puts it, "the land affording a very good iron-stone, divers persons of quality in England were stirred up by the providential hand of the Lord to adventure their estate upon an iron work which they began at Braintree." Massachusetts was equally interested and the General Court assigned Winthrop and his partners three thousand acres of the common land of Braintree for the "encouragement of an iron worke to be set up about the Montocot River," and granted them a twenty-year monopoly on condition that they should, within a reasonable time, produce sufficient iron to supply the needs of the Colony.

It was, therefore, with high hopes that Winthrop returned from England in 1643, bringing with him some skilled smelters and a thousand pounds worth of materials and supplies. But ill luck dogged the venture from the start. Because of adverse winds the voyage lasted fourteen weeks, and the workmen, sick with ship fever, arrived only after frost had sealed the bogs from which the crude ore had to be scooped

out with long ladles; so operations were not begun till the following Spring.

The local historians of Saugus and Braintree are still somewhat acrimoniously contending as to which town had the first smelter; but recently discovered evidence points to the Braintree plant as being at least a month the earlier. Winthrop preferred Braintree because of the quality of its ore and because farmers in the region could supply charcoal. On the other hand, the owners of some of the bogs he needed proved Shylocks when he tried to buy. So, although he built the first smelter at Braintree, he immediately followed it with a larger plant in Saugus which could smelt eight to ten tons of ore a week, and soon produced bar and wrought-iron, and cast kettles, anchors, etc. The Braintree works were on the Monatiquot River where Elm and Adams Streets now intersect. William Ames's house stood a mile away across the fields.

While the furnaces and forges were building the Company issued a glowing prospectus. Colonists were urged to buy stock and share future profits, and invited to make payment in beaver-skins, corn, charcoal or other satisfactory commodities. They were led to expect that the enterprise would soon not only supply iron enough for home consumption, but might add bar-iron to the fish, food-stuffs, pelts, cattle and lumber that New England was already beginning to export. The authorities favored the project by temporarily remitting its taxes, the iron-workers were relieved from military duty and (most astonishing) it was decided not to be a profanation of the Sabbath to tend the smelting fires between Saturday sunset and Monday morning.

But the Company did not prosper. Its iron turned out to be brittle, the cost of labor was high, and the various managers sent from England proved either incompetent or dishonest. Shareholders, not getting the expected dividends, refused to advance the money they had subscribed, and, as Hubbard, the first historian of the Colony, writes, "at length instead of drawing out bars of iron there was hammered out nothing but contensions and lawsuits." After dwindling for nine years the Company went bankrupt, and its lands, forges and effects were sold.

Apparently William Ames, who had cast in his lot with the iron works, did not prosper either. I hope he had not invested his savings in them. He died the year after they closed, and may have been ill, for he was but forty-nine, and the Ameses were usually long-lived. His estate was valued at only £45 while those of most of his fellow townsmen were appraised at about twice that sum. His wife filed "a true Inventory of ye Estate of Wm Aymes, hir late husband, to the best of hir knowledge, save some apparell of hir husbands & other smale matters, & when more comes to her knowledge she will discover it." His house, house-lot and an out-house (perhaps his workshop) were listed at £35. He had "two young cattel and three swine." The meager household equipment of chests, chairs, stools, bedding and utensils was called worth only £5, all told. There was a Bible (the sole book in the house), some lumber and a ton of unworked iron. With due regard for the tendency of all executors, then and since, to undervalue estates, it is evident that William Ames died comparatively poor. He was, however, respected in the com-

munity, for seven years before his death he was admitted a 'freeman,' or voter, of the Colony, which testifies that the other freemen of Braintree had vouched for his character, that he owned taxable property worth at least £20, and, above all, that he was a professing member of the local church. Only about one man in every four was then admitted a freeman in Massachusetts.

William left a young family. He had five daughters, ranging in age from four to thirteen, and one boy of seven named John. It is from this lad that we descend; and if he had not been born, or had proved another girl, there would be no Ames family of Easton, and our name would have been snuffed out like a candle.

Burdened with this adolescent brood William's widow, after a proper interval, prudently re-married. Her second husband, John Niles, a weaver, supported the children — at least he so alleged when, in 1663, he sought title to sell William's abandoned dwelling.

JOHN AMES AND THE BRIDGEWATER PURCHASE

ALTHOUGH WILLIAM AMES'S YOUNGER BROTHER, JOHN, who came with him from England, had no children and so did not carry on the line we must take account of him because he was a founder of Bridgewater and brought the family there to dwell for five generations on land he handed down.

We first find this John in Duxbury eight years after he landed from the 'Hercules'; but it is likely that he came there earlier with his fellow passenger and life-long companion Thomas Hayward, and Hayward was in Duxbury before 1638. At any rate John is listed (his name spelled 'Aimes') in Duxbury's first roster, when he was thirty-three, as "capable of bearing arms," which meant he was in good health and equipped either with a pike and sword or a musket. The pike must have been a most ineffective weapon, except perhaps on horseback, for it was merely a ten-foot pole with a spear at the end. Even the clumsy match-lock musket, with its forked stick to rest on while one took aim, was undependable for on wet or windy days the powder in the pan might either blow away or be too damp to fire.

Duxbury was an offshoot from Plymouth. In 1632 Governor Bradford wrote, "In this year the people of Plymouth began to grow in their outward estates by the

flowing of many people into the country, by which means Cattle and Corn rise to a great price. And now their Stock increasing and the Increase vendible, there is no longer holding them together. They must go to their great Lots: they can no otherwise keep their Cattle, and having Oxen grown they must have more land for Plowing and Tillage. For this they scatter round the Bay of Plymouth, and the Town wherein they lived till now compactly is soon left very thin." During the first years, however, these scatterers "promised to remove again to Plymouth in the Winter Time, that they may better repair to the Worship of God." Among them were Captain Miles Standish and John Alden, with both of whom John Ames was associated as we shall see later.

In his 'History of Duxbury' Justin Winsor reports that John Ames told a neighbor he had "come out of England for stealing a calf." In spite of John's marked propensity for farm products, I do not believe this. It was either one of his little jokes or the neighbor's malicious invention, for calf stealing, like sheep stealing, was then in England so serious a crime that a man might hang for it. Deacon Hayward was much too important and God-fearing a citizen to accept a calf stealer as brother-in-law, and his sister, Elizabeth, and John Ames completed their wooing, begun ten years before on the 'Hercules,' and were married by Governor Bradford. Nor did the Duxbury people believe the tale either, for they elected John to serve a term as town constable; and a constable then legally represented the Crown, and was charged with preventing any form of lawlessness. Only men of respected character were ever chosen for this important post.

John was undoubtedly a land lover. To the end of his life he was constantly buying or exchanging plots; and we next find him taking part in an extensive transaction known as the 'Bridgewater Purchase.' He was one of fifty-four Duxbury men, Miles Standish, John Alden and Thomas Hayward among them, who, in 1645, petitioned the Plymouth Court for permission to acquire additional land. Their plea was granted, though this was merely a legal sanction to buy from the Indians — a precaution intended to safeguard the still friendly red men from being fleeced by unscrupulous traders. The tract they chose lay to the westward of Duxbury; and they appointed Miles Standish with two others to negotiate its purchase and to "divide and lay forth the same" in equal shares among the petitioners, or, as they were called, 'Original Proprietors.'

Four years elapsed before the land was actually bought; but on March twenty-third, 1649, the Indian chief Massasoit, most powerful of the Massachusetts sachems, set his official mark — a rough drawing of his own hand — at the bottom of a deed of sale and had it signed by his personal name Ousamequin, or 'Yellow Feather.' I hope the buyers bound the bargain, as the Pilgrims had done when he made a treaty of friendship with them in Plymouth, by giving him *aqua vitae*, of which as Governor Winslow wrote, "he drank a great draught and sweat all the while after," though he lost none of his dignity.

For a payment of "7 coats, a yard and a half in a coat; 9 hatchets, 8 hoes, 20 knives, 4 moose skins and 10 yards

and a half of cotton," Massasoit conveyed to the shareholders, "to have and to hold to them and to their heirs forever, a tract of land usually called Satucket, with all its woods, underwoods, meadows, rivers, brooks, rivulets, &c.," extending seven miles due east, west, north and south from an Indian fish weir (later overflowed by Robins' Pond) in what is now the town of East Bridgewater. The deed was signed on a nearby knoll still called Sachem's Rock. This original tract, somewhat reduced in size and changed in shape by later negotiations, covered one hundred and ninety-six square miles, and John Ames's share would have been over two thousand acres.

The shareholders decided to build their first settlement on Town River near the present center of West Bridgewater, and drew lots for homestead sites of six acres apiece on either side of the stream. The remaining land they later parcelled out, by agreement among themselves, in sections of different sizes and locations, for accessible and well watered tracts and good stands of timber were more valuable than the more distant parts or those covered with swamp or underbrush. Most of the proprietors did not attempt to clear or cultivate their outlying holdings, but sold them to later settlers or bequeathed them to their heirs.

Eighteen of the shareholders removed the next year from Duxbury to Bridgewater and established the first interior settlement in Plymouth Colony. John Ames was one of these pioneers. They built their houses close together in a compact little hamlet for mutual aid, and, if need be, for protection against the Indians; and the men walked or rode to their wood-lots or farms. For six years the village ranked

merely as an offshoot from Duxbury, but in 1656 the Plymouth Court ordered that it hereafter be "a township of itself." It had already been known as Bridgewater for some time, and Judge Mitchell, the local historian, supposes the name "was probably adopted from fancy, as none of the first settlers were known to have come from Bridgewater in England." But John Ames was from Bruton, only a score of miles from the English Bridgewater, then a principal town in his county, and it seems not unlikely that he suggested it.

In this new and remote settlement John Ames lived and farmed for almost fifty years, for he was nearly ninety when he died. We find a hint of the early surroundings in the first entry of the town records. After stipulating that anyone absent from future meetings should be fined, it orders that "five wolf traps be built," and these were such sizable affairs that a later highway had to be diverted to avoid one of them.

All we know of John Ames's later life is from these records. I have already mentioned his dealings in land. Like his brother, he became a 'freeman' or voter of the Colony, which implied that he was likewise of good character, a taxpayer and the enrolled member of a church, though during its first years Bridgewater had no settled clergyman, but depended on its deacon or the visits of an itinerant preacher. John seems to have been rather a pillar of the congregation, for he engaged to join in building a house for the first permanent minister and in guaranteeing him a yearly salary of £40, payable half "in money in Boston" (cash was lacking in the settlement) and half in provisions. Once,

when the parishioners proved delinquent, John was appointed to collect the stipend "by loving persuasions and all legal means" — the mailed fist in the velvet glove, as it were. He must have been a hale old gentleman, for when nearly sixty he served as one of the town troopers who might be called by the Colony for military service in case of need. He died in 1698, and was buried in the first village churchyard, the site of which is now marked only by a memorial stone.

But John Ames 'seynior,' as he was called in his later years, was childless, and, as I have said, only figures in this story because he adopted John, the son of his brother William, as his heir, and brought him to Bridgewater, to carry on the fifth generation of the family since the first John Ames of Bruton.

JOHN AMES 'JUNIOR' AND KING PHILIP'S WAR

WE LEFT THIS JOHN JUNIOR (TO GIVE HIM THE TITLE he went by in Bridgewater during his uncle's life) as a fatherless boy of seven in Braintree. He may have thought better of farming than of iron-working — a trade in which his father had apparently not prospered. I imagine that as soon as he was old enough he walked the long 'Bridgewater Path' to his uncle's fields and helped with the haymaking and harvesting. Meantime the senior John was getting on in years, and probably yearned for someone of his blood to inherit the lands on which he had spent a lifetime of labor. At any rate, in 1668, when he was twenty-one, John junior joined his uncle in Bridgewater permanently. He may have felt an extra attraction toward the town because of a young woman named Sarah Willis whom he married almost immediately afterwards. She was the daughter of John Willis, first deacon of the parish and a leading citizen.

An interesting old document has recently come to light which shows the arrangement John senior made for his nephew's future. It is dated the year before the latter came to Bridgewater, and grants the younger John and "his heirs, and any that he might marry, or shall leave his widow if it shall so fall out," thirty acres of upland and a parcel of meadow land of unspecified extent, all near the center of the settlement and most of it bordering on Town River —

a valuable bequest. The deed, though witnessed, was not entered on the town books, but the elder John bound himself to file it legally whenever the younger John should so demand; from which I infer that it was to be kept secret between them unless they disagreed. There seems to have been no such difference, however, for it was not recorded till after John senior's death.

So John Ames junior settled down in Bridgewater to farm and (more important to us) raise a family. He had three daughters, and his five sons proved prolific. Up to 1896 Dr. Azel Ames had traced seven hundred and fifty-four male descendants to him. Those then living were scattered through every state in the Union, and ranged in occupation from heads of great corporations and college presidents to an acrobat in a travelling circus.

This John junior was, remember, the first native-born male in the family. Both his father and uncle had grown to manhood in England, and must have considered themselves thorough Englishmen and members of an English colony, for the Revolution was still a hundred years in the future. They undoubtedly spoke the strong Somersetshire dialect in which 's' was pronounced like z, 'f' like v, and the pronoun 'I' often like chi. It probably sounded something like this:

Chi tell thee what, good vellows,
  Before the Vriars went hence
A bushel of the vinest wheat
  Was zold vor vourteen pence,
And vorty eggs a penny
  That were both good and new;
And this Chi zay myself have zeen,
  Zo take it zure for true.

King Philip's War

Before John junior had lived six years in Bridgewater exciting events began to happen thereabouts, for hostilities broke out between the settlers and the Indians. Except for some trouble with the Pequots nearly thirty years before the Colonists had up to now lived on peaceful terms with the red men, especially in Plymouth Colony where Massasoit honorably maintained the treaty of peace and friendship till he died. All Plymouth grants to buy tracts from the Indians stipulated that they were not to be molested, and they were allowed to remain as squatters on outlying land even after they had sold it. They also proved helpful neighbors at first, guiding the white men through the forest trails, trading with them for beaver and other valuable pelts, and teaching them how to plant and manure with codfish heads the Indian corn and raise new vegetables like the pumpkin.

These amicable relations lasted while the Colonists were few and vacant land was plentiful; but after the Great Migration, which brought thousands of new settlers into Massachusetts, the situation changed. The Indians never quite realized what was happening when they sold their lands. The English took it for granted that the deeds, couched in terms of English law, entitled them to the same exclusive and final possession as at home; but the Indians had never held land in this sense. When the fish and game in any region became scarce they struck their wigwams and moved. They expected the whites would do likewise, and probably thought they were ceding little more than

temporary hunting and fishing rights. But the white men built permanent homes, fenced their lots to prevent cattle from straying and forbade poaching in their woods and streams.

Moreover, as they came to outnumber the natives they grew less and less tolerant. In their Puritan hearts they had always secretly regarded the savages as children of Satan, and when they felt secure enough began to treat them accordingly. Indians were forbidden to hunt or fish near any settlement on the Sabbath; and, when they could be rounded up, were forced to listen to hour-long sermons in a tongue they did not understand. It was illegal to sell them liquor (though the whites were fond enough of it) and a drunken Indian was fined several days work for the benefit of anyone who informed on him — an easy method of getting free labor. And these are only samples of the constantly increasing regulations and penalties imposed on the natives without their own consent.

It must have been a dull red man who could not read the writing on the wall. Unless they struck back while some strength still remained to them they would soon be crowded from their last hunting grounds and wholly dominated by an alien race. So the Sachem Philip, son and heir of the friendly Massasoit, went secretly from one embittered tribe to another and incited them to make the uprising called King Philip's War, which broke out in 1675, when John Ames junior was twenty-eight, and lasted through the following year.

It consisted of a series of sporadic Indian raids on the smaller New England towns; and Massachusetts, where

sixteen villages were wholly destroyed, suffered most. The savages were now formidable foes for they were armed with flint-lock muskets bought in trade from the French in Canada while most of the Colonists still had only the old clumsier match-locks. They would sally suddenly from the cover of the forest, burn outlying farmhouses, drive away livestock, and kill the inhabitants who could not escape to some nearby refuge. The whites retaliated by recruiting small local companies of troops and ambushing the Indians whenever they could find them; but during the first year of the war the savages did the attacking and seemed to have the advantage everywhere.

The outbreak found Bridgewater wholly unprepared and defenseless. It numbered only sixty-four men over twenty years old, and less than three hundred inhabitants all told, counting women and children. The Plymouth authorities "strongly urged them to desert their dwellings and repair to towns by the seaside"; but they determined to protect their homes. Powder and shot were issued to every householder, the minister's house was fortified, and a stockade of logs "set seven feet above the ground, six rods long and four rods wide," was built around the meeting house in the center of the settlement.

John Ames senior and his nephew helped in this defensive work, but the elder John was now sixty-five, too old for military service. John junior, however, was one of seventeen townsmen who volunteered for home defense or to join with similar companies recruited in other villages. According to the Plymouth records this little band from Bridgewater, "well armed and furnished with horses, was the first

upon the march in all the country"; for when in June, 1675, they learned that the Indians were attacking Swansea, near Fall River, they hurried to its relief. On the way they met fugitives who reported that the Indians were out in force, had killed six, "the first that fell in that war," and warned the troopers to return to safety. But they kept on, reached Swansea, drove off the savages and rescued the terrified townspeople who had taken refuge in the stockade. The Bridgewater troop probably took part in several such expeditions but we have record only of their doings nearer home.

Bridgewater itself was spared for nearly a year, but then, to quote the local pastor, "God began to pour out on our inhabitants the cup of trembling." As they were gathering for church one April Sunday morning they heard shots, and discovered that the Indians had set fire to an outlying house and barn and robbed several farms, killing some horses and swine and carrying more away. The troopers pursued them without success till their rations gave out and they were forced to turn back.

A month later Indians, estimated to number about three hundred, made a much more serious assault. They burned all but one of the outlying houses and then attacked the settlement itself. But the inhabitants rushed from their stockade and fell upon the savages with such ferocity that they soon retreated into the forest; and, thanks to a providential thunder storm, only five of the village dwellings were burned.

Later, scouts reported that Indians were again gathering in the vicinity, and a messenger was dispatched to Plymouth

by night to ask for help. Captain Church, the commander of the Colony forces, sent a company which was to join the Bridgewater troopers some miles from the village; but on their way to the meeting place the Bridgewater men came unexpectedly upon the savages, and, as the record says, "fought with them and took seventeen of them alive with no help from Captain Church. And not one of us fell by the enemy."

The Bridgewater troop next joined Captain Church's soldiers in a skirmish on the Taunton River, near the southern boundary of the township, where Sachem Philip himself was hiding in a swamp. They might have captured him, as they did several of his followers, but "the cunning fox escaped them for that time." Captain Church, however, pursued the fugitives and killed or captured nearly three hundred. Not having enough provisions for both his own soldiers and their prisoners he sent word ahead to Bridgewater that he would stop there over night on his way to Plymouth. The townsmen received him "with great honor and rejoicing." The Indian captives were jailed in the stockade and "well treated with victuals and drink, and had a merry night of it and laughed as loud as the soldiers, not having been so well treated before for a long time." It was perhaps their last merry night, since in the morning they were marched off to Plymouth to be sold into slavery in the West Indies — for when the Colonists tried to hold the Indians as slaves they most ungratefully vanished into the woods at the first opportunity.

The Plymouth authorities remitted the money received for the captives taken by the Bridgewater troopers, and

the town voted "that the soldiers that took them should have it." As John Ames junior had been particularly mentioned for valor and credited with several prisoners I am afraid that some of this money came to him, and the family is thus guilty of early participation in the slave trade.

(Confidentially, another family misdemeanor is our responsibility for polygamy in Utah, for John junior's sister Hannah was the great-great-great-grandmother of Brigham Young, organizer of the Mormon Church. But this we may excuse as due to the natural weakness of the female line.)

King Philip's War lingered on for some time in Maine and New Hampshire, but the Massachusetts Indians were so wholly crushed that there was no further danger from them. The Colonists, however, paid heavily for their safety both in property and in lives, for one man in every sixteen of military age was killed. But though no troops had been more actively engaged than those of Bridgewater, not a man of them lost his life.

The General Court of Massachusetts decided that the Lord had afflicted the Colonies with this savage war partly because they had become lax in persecuting the Quakers and partly because some of the Boston men had begun to wear periwigs, and the women to indulge in "cutting, curling and immodest laying out of their hair." Fortunately there are no Indians about nowadays. On the other hand, the Reverend Cotton Mather considered Bridgewater had been specially protected by the Deity because, as he wrote, "it was a most praying and pious town, the first planters of it being a set of people who made religion their main

interest. . . . Although often assaulted by formidable numbers of the enemy, they never lost one of their inhabitants, young or old; and once when the Indians began to fire the town then God from Heaven at the same time fought for them with a storm of lightning, thunder and rain, whereby a considerable part of their houses were preserved." The town parson, however, seems not to have regarded his flock as quite so stainless, for in a sermon preached at this same time he mentions, "beside other evils I might name is the iniquitous, scandalous and horrible abuse of rum which threatens ruin to this place."

The Rev. James Keith who thus rebuked the topers of this "praying town" was Bridgewater's first settled minister. John Ames senior, you will remember, had helped to guarantee his salary and build his house. He took charge of the flock in 1664, at the ripe young age of twenty-one, and continued to preach to them for fifty years. As he was highly esteemed by both Increase and Cotton Mather, the leading clergymen of the time, their sermons well illustrate the religious doctrines to which John Ames senior and his nephew subscribed as church members; and the church was a dominant influence not only during their lives but for long afterwards in the lives of their descendants.

The Puritan Religion

The accepted religion in early New England was a rigid form of Calvinism. Its chief tenets were the infallibility of the Scriptures and Predestination. The Bible was held to be the authentic, complete and final message of God to man. It contained all the knowledge, ethical, scientific and his-

torical, He had vouchsafed to reveal. It was to be interpreted literally, and serve as the sole guide in every sphere of human conduct. William and John Ames may have suspected that the earth moved round the sun (though only two years before they left England the Roman Church forced Galileo to forswear that belief or burn at the stake) but if faced with the Bible statement that the Lord made the sun stand still till Joshua could polish off his enemies they would unquestionably have concluded either that the astronomers were wrong or that the Creator had later decided to alter the planetary system. The God of the Calvinists was much more akin to the stern and vengeful Jehovah of the Old Testament than the Heavenly Father of the New. Satan was believed to walk among them on the earth as an active and potent adversary of the Almighty, sometimes even appearing visibly (Martin Luther threw an ink-pot at him) and in devious ways tempting men, women and even little children into mortal sin. Indeed, I sympathize with the newly converted Indian who inquired whether, since the Devil was so powerful, it might not be prudent to pray to him also — at least occasionally.

The second fundamental doctrine of Calvinism was Predestination. Adam had sinned in the sight of God; all mankind had inherited his transgression ("In Adam's fall we sinned all") and were therefore doomed to everlasting torment. But, in mercy, the Lord had 'predetermined' to spare certain chosen individuals in each generation. They themselves had nothing to do with this selection, and no amount of good conduct could save those not so chosen. But the elect, by prayer, piety and inward searching of their

souls, might move the Almighty to reveal to them the precious secret of their own salvation; and it became the duty of the clergy to bring them into the proper frame of mind to receive such revelations. To keep constantly before them the fate of the damned seemed the most effective method. Rev. Michael Wigglesworth's 'Day of Doom,' first printed in 1662 and reissued constantly for fifty years, thus pictures the lot of the condemned:

"They wring their hands, their catiff hands,
And gnash their teeth for terrour;
They cry, they roar for anguish sore,
They gnaw their tongues for horror.
But get away without delay,
Christ pities not your cry!
Depart to Hell, there may you yell
And roar Eternally."

Even as late as 1741 the eloquent Jonathan Edwards used to stir congregations to hysterics by describing the agony of a spider dropped on hot coals and then contrast this instant pang with the torment of those fated to burn through all eternity in the brimstone lake of Hell, while the saints looked down from Heaven and enjoyed the spectacle. With their terrors thus excited, it is small wonder most churchgoers should so yearn for a sign they personally were to be spared that they ultimately convinced themselves they had experienced the revelation and were numbered among the elect.

All truth being thus shut between the covers of the Bible the clergy, as its interpreters, naturally gained enormous influence. They ruled not only the church but the state. No new town might be established till it could support a

minister. Up to 1684, and in spite of contrary orders from England, only members of the Calvinist Church were allowed to vote in Massachusetts. Edward Randolph, agent for the Crown, writing home in 1662, reports, "here all is managed by the Clergye without whom the magistrates venture not to act. They allow noe children to be baptized but the children of Church members, though some give a larger latitude and admitt the granchildren."

In smaller villages the church was the sole gathering place and the center of all intellectual and social activity. Its parson not only supervised the morals and daily conduct of his townsfolk but often acted in cases that now would be decided in court. Only ninety years ago, for example, an Easton man was tried in church for cheating a neighbor and debarred from the communion — a sentence that made him hastily restore the cash.

Indeed it was the supreme authority of the Puritan clergy that proved their undoing. Most of them were unquestionably sincere and godly men, but bred in so narrow a creed that they could recognize no truth but that of their own teaching. Laymen began to resent seeing peaceful Quakers, men and women, stripped to the waist and whipped through the streets at a cart-tail, branded with the letter H as heretics, driven into the wilderness and sometimes even put to death, merely because they held a different form of worship. And, finally, the hysterical persecution of witches, set on foot by Cotton Mather (then a Fellow of Harvard College, by the way) proved more than they could stomach. In one year, when John Ames junior was forty-four, two hundred persons, many of them harmless old crones or gaffers, were

accused of witchcraft, one hundred and fifty imprisoned, and twenty-nine put to death, on wholly superstitious evidence sometimes furnished by frightened or malicious children. Then the more enlightened preachers rose to protest against such an abuse of Scriptural interpretation; people began to think more freely for themselves, and the creed of Calvin, though still dominant, ceased to be the sole allowable belief.

With such a narrow mental horizon it is not surprising that the New England Puritans, and for some generations their descendants, lagged intellectually behind Europe. In England Harvey was discovering the circulation of the blood, Newton gravitation, Boyle the law of gases and Halley searching the heavens with his telescope, while our forebears in Bridgewater were listening only to dogmatic expositions of the Scriptures and reading such doggerel as I have quoted instead of the writings of Locke, Hobbes, Milton, Isaac Walton, Herbert, Dryden and Herrick.

CAPTAIN THOMAS AMES AND THE FRENCH AND INDIAN WAR

JOHN AMES JUNIOR'S SON, THOMAS (WE ARE NOW IN THE sixth generation), reverted to his grandfather's trade and became a blacksmith. Indeed, with one exception, all our direct forebears in America were iron-workers; and many of us still continue to be interested in the shovel works they established in Easton, if now only as stockholders. The second Thomas Ames was twenty-two when a courier rode into Bridgewater with news which must have stirred vivid memories in his father's mind. After many years of peace the Indians were again upon the war-path.

The conflict between France and England over the Spanish Succession (called 'Queen Anne's War' in the Colonies because it happened in her reign) had spread to America by way of the French in Canada, and it now seemed to the Canadians a propitious opportunity to win over the Indian tribes in New England as allies by aiding them to raid and plunder. The first plan was to attack Boston. A joint force of French and Indians was to gather secretly in the surrounding forest and issue forth at night while the citizens were asleep — hardly a practicable stratagem since Boston was almost an island, surrounded not by forests but by water. The Indians, however, preferred a series of surprise attacks on smaller villages near the frontier — a method of warfare to which they were accustomed. At two

o'clock one winter morning in 1704 two hundred Indians, led by a few Canadians, swarmed over the palisades of Greenfield, Massachusetts, killed fifty of the inhabitants and took more than a hundred men, women and children into the forest as captives.

Remembering their fathers' tales of the Indian attacks nearly thirty years before, several young men of Bridgewater volunteered to serve with the British troops sent over to retaliate by making a punitive expedition into Canada. It was decided not to strike at Montreal or Quebec, which would involve long and dangerous marches through the wilderness, but to go by sea and attack Port Royal, the French stronghold in Nova Scotia — a province then called Acadia and the scene of Longfellow's 'Evangeline.'

The first two attempts took place in 1704 and 1707 with no results except some inconsequential skirmishings. Thomas Ames took part in the third, and with better fortune. He was chosen to lead the little squad of Bridgewater volunteers and so had the title of Captain. This was given to the head of every town band irrespective of its size, and New England captains became as numerous as Kentucky colonels. The Colony voted him a month's pay in advance, a uniform coat worth thirty shillings and a 'Queen's musket.' In September, 1710, he marched his little squad to Boston, joined the British soldiers, and set sail for Nova Scotia. Five days later they landed and besieged the fortress at Port Royal. After a long artillery duel the garrison, which numbered only a fraction of the besiegers, surrendered under a flag of truce; and Captain Thomas watched the French march out between two ranks of

Colonial troops, to whom the tactful English gave this place of distinction, with drums beating, flags flying and all the honors of war.

Although he and his companions had seen little fighting the success of their expedition was important, for Port Royal was the only stronghold in Acadia and its capture meant the English possession of the entire province. So when, with his Queen's musket and red coat, Captain Thomas Ames returned to Bridgewater after less than a month's service he was doubtless feted by his townsfolk. But they must have had other reasons to respect him, for in 1728 they elected him to the Massachusetts General Court; and in those days New Englanders usually took some pains to be represented by their most competent citizens — a policy I wish we had the sagacity to continue. He happened to be a member of that Court when it granted the petition of some forty householders, then dwelling in a part of Norton, to set up a new township and call it Easton — a decision which proved so important to his great-grandson that I hope Captain Thomas had the foresight to cast a favoring vote. Apart from these two services he seems to have lived quietly in the village, supporting a family of five sons and four daughters by working at his forge.

His Son, Thomas Ames

Captain Thomas's eldest son, also named Thomas, carries on our line in the seventh generation. Like his father he was the village iron-smith, and may never have left Bridgewater except for an occasional trip to Boston, either driving a cart through the rough, narrow, forest roads, or,

if the wind were fair, going by water from Duxbury, to buy iron, go-to-meeting apparel, or such luxuries as were not produced at home. He married a neighbor's daughter and had six children. Except for these achievements we know nothing of him but that he acted occasionally as some minor town official.

We spring from his second son, John.

The Oncoming Revolution

Between the time when William Ames landed in New England and the birth of this great-great-grandson, John, almost exactly a century later, our ancestors were probably far too busy building their houses, clearing their fields, feeding large families and attending to their trades to care much what was happening in the mother country. King Philip's War was a purely local peril. They fought it without aid from over seas, and enlisted in the Canadian expedition not so much to help the British as to prevent similar Indian attacks. Indeed, it is unlikely that the first four generations of Ameses in Bridgewater took any keen personal interest even in the periodic spats between England and the Colonies themselves, except perhaps as lively topics to discuss at their forges or across their fence rails. Of course they grumbled when import duties increased the price of English goods and approved when a neighbor, or they themselves, set up some industry prohibited by the English Board of Trade, like a smelting furnace. As they passed from hand to hand a bright, newly-minted 'Pine Tree' shilling which, to appear lawful, bore a thirty-year-old date because England had declared it illegal to coin

money in Massachusetts after 1652, they must have grinned at the laxness of their absentee rulers. I imagine, too, that they made salty comments on the discomfiture of the successive royal Governors sent over to Boston, the chief New England port, with instructions to collect taxes and actually enforce the Navigation Acts, only to resign in disgust without having made any lasting headway against the baffling policy of delay, dissimulation and unkept promises of the Colonial officials.

England, on the other hand, made only occasional and half-hearted attempts to govern the Colonies during these early years. At first they had seemed too small and remote to trouble much about, and while they were growing in population and economic importance she was distracted by her own internal troubles, shifting monarchs, and foreign wars. The strife between Charles I. and Parliament, already threatening when William and John Ames left Bruton, broke out in 1642, and only ended with the beheading of Charles and the establishment of a Commonwealth under Cromwell. Then followed the Restoration with Charles II., who was succeeded for three unhappy years by his brother James II. James was driven from the throne by his son-in-law William of Orange, who came from Holland pledged to restore religious and civil liberty in England, and who, jointly with his wife Mary, reigned as William III. William was followed by Queen Anne, by George I. of Hanover, and by George II. Under all these rulers England was almost constantly at war, either at home in Scotland and Ireland, or abroad with the Dutch, Spanish and French.

It was not until 1763, when the vast domain of Canada

was added to her other North American possessions, that she finally awoke to their value and to the vital need of governing them with a firmer hand. She had to set up new centers of administration in Canada, her treasury was exhausted and British merchants were loud in their complaints against the Yankees who illegally evaded all import and export duties. It seemed to English statesmen only fair that the Colonies should hereafter meet the cost of governing them and pay something over for the protection of the British armies and navy to which they owed their security and commerce. Especially they felt the need of curbing Massachusetts lest her example infect the other Colonies with "the New England disease" of insubordination, which, as one royal governor wrote, was "very catching."

Although England was unwise in choosing her agents and tactless in her methods of attempting to enforce the new imposts these were not in themselves either unjust or oppressive; and if a firm and reasonable policy had been adopted earlier and consistently followed the Colonies might never have revolted, and we, like Canada, be today a contented Dominion. The British were probably quite as surprised at the fiery resistance provoked by their new rulings as we should be if the inhabitants of Alaska suddenly refused to pay taxes or vote the salary of their territorial governor. But the attempt at coercion came too late. Four generations had now grown up in America who, though they theoretically acknowledged the crown, had developed a wholly independent form of government for themselves and successfully evaded almost all attempts to tax or regu-

late them. It was as if the father of some young family were so immersed in business cares as to leave his children without discipline or supervision until they became of age and then suddenly tried to assert full parental control. Neither the Stamp Act, the quartering of troops in Boston, the Boston 'Massacre,' nor the 'Tea Party' really brought about the Revolution. Like the blowing up of the 'Maine' in the Cuban War, or the sinking of the 'Lusitania' in the World War, they were only spectacular events which served to fan popular excitement and furnish themes for such oratorical slogans as Wilson's "make the world safe for democracy" or Patrick Henry's "give me liberty or give me death!" It was not to gain additional independence but to preserve the independence they already had that led the Colonies to revolt. The idea of a permanent scission from England was only the inevitable sequel.

CAPTAIN JOHN AMES

THE FIRST AMES SHOVELS AND THE REVOLUTIONARY WAR

THOMAS AMES'S SON, CAPTAIN JOHN (DISTINGUISH him from the previous Johns by giving him at once his later title) lived through the most eventful years in American history. He may never have seen George Washington (Bridgewater seems one of the few Massachusetts towns which does not boast that Washington spent a night there on his way to command the army in Cambridge) but he was born six years earlier and died six years later than Washington and his life covered the same span. He too watched the Revolution brew, fought in the war and saw the new Republic conceived, born and take its place among the nations.

But until John was a grown man, married and the father of a son and triplet daughters, he undoubtedly considered himself a loyal, though perhaps lukewarm, British subject. He must have attended a Bridgewater town meeting called in 1763 to celebrate the treaty by which all Canada became an English possession, and heard the local speakers echo James Otis, who proclaimed at a similar meeting in Boston that "the interests of Great Britain and her American plantations are mutual; what God in his Providence has united let no man dare to put asunder!"

When, however, staggering under the costs of the war,

Parliament resolved "it is just and right that a revenue be collected in America," imposed additional duties and — as a crowning outrage — even tried to collect them, the Colonists changed their tune. It was not so much the laying on of new taxes that they balked at (they were used to that) but they strenuously objected to actually paying them. So another series of town meetings was called, now quite silent on the subject of loyalty but voting unanimously to buy no more English importations. Tea and coffee were forsworn; it became a sign of patriotism to go threadbare till the women of Bridgewater, banded together as 'Daughters of Liberty,' could weave enough homespun to supply the lack of cloth; and the men actively began to make substitutes for other "forrin superfluties" as one town clerk called them.

It was probably this embargo that led Captain John to undertake the manufacture of shovels; for, though the farmers still used homemade tools shaped out of hard wood and merely shod with iron for light digging, all heavy work was done with shovels brought from England. Like his father and grandfather before him John had learned the iron-worker's trade, and obviously learned it well; and he apprenticed his eldest son, David, to Hugh Orr, an expert iron-master of Bridgewater, who made the first muskets and cannon produced in America.

Just when John turned out his first batch of shovels is uncertain. It was probably about 1773, but at any rate before the outbreak of the Revolution. They were certainly the first made in quantity in America, though individual blacksmiths may have hammered out an occasional specimen

now and then. He had inherited his father's forge on Town River and used its waterwheel to operate what, according to family tradition was the first trip-hammer ever set up here, though this cannot be proved. At any rate, with this eighty-pound hammer, probably with bog-iron dug from the swamps and smelted in the vicinity and with charcoal furnished by neighboring farmers as fuel, he made the first Ames shovels — roughly wrought, perhaps, but well fashioned and durable.

The base for his trip-hammer, a massive granite block, was recently dragged out of the river where it sank when the walls of his old forge collapsed from fire and disuse. It now stands at the entrance to the West Bridgewater Memorial Park with this inscription:

The Land of this Park
was bought from the Massasoit Indians
by Miles Standish and others
as part of the Bridgewater Purchase,
and allotted to John Ames,
an original Shareholder and Settler.
And here, before the Revolutionary War,
the fourth inheritor, Captain John Ames,
began the manufacture of shovels
with a trip-hammer set on this stone.

While Captain John was thus busy at his forge political events were leading rapidly toward the Revolution. In 1768 British troops were quartered in Boston; in 1769 came the 'Boston Massacre,' in 1773 the 'Tea Party.' The following year the British closed the port in retaliation, and the first Continental Congress met at Philadelphia. In April, 1775, a sweating horseman (for Paul Revere was not the only

courier) rode into Bridgewater to tell of skirmishes at Lexington and Concord; and in July the earthworks on Bunker Hill were being dug, perhaps with Ames shovels. Some months before the Declaration of Independence was read from the Bridgewater pulpit John volunteered, and was commissioned Captain to command the 5th Company of the 3d Plymouth County Regiment.

The American troops were of two kinds, regulars and militia. It was at first proposed that the regulars should enlist for one year only, but the far-sighted Washington refused to command so temporary a force, and their term was extended to "three years or the duration of the War," though few of them then believed the conflict could last so long. Captain John joined the militia, which, for the most part, was made up of men with dependent families who could not well leave their farms or trades for long periods. They were, therefore, to live at home, but were drilled and armed like the regulars and engaged to march on local 'alarms' and serve as long as the emergency required. Although they took part in few battles they proved invaluable because they hemmed in the British and hampered their movements everywhere while Washington's forces remained mobile. After the evacuation of Boston the British, to preserve their access by sea, held the ports of New York and Philadelphia and later seized Newport; and Captain John's regiment was charged to prevent the Newport garrison from moving elsewhere or from co-operating with the troops in New York.

One Sunday morning in December, 1776, the Bridgewater congregation was at church when another horseman

clattered to the door with news that British vessels were bringing troops to Newport, and Captain John's company was ordered to march there immediately. They set out before noon, but the British succeeded in landing about six thousand men, including two regiments of Hessians, and their position was so strong that the assembled militia felt it hopeless to dislodge them, though Washington sent two generals (Benedict Arnold was one) to direct the attack. The British then seemed to settle down into winter quarters; and, depending on their spies to report any new activity, Captain John's company marched home after serving fifteen days.

They were not summoned again until June, 1778, when tidings came that a French fleet (ostensibly privateers, for the French had not yet officially become America's allies) was to attack Newport by sea and the militia were called to assist by land. Once more Captain John led his company into Rhode Island, but this attempt also proved abortive. Promised reinforcements from the Continental army under Lafayette were delayed in arriving, and without them the French and militia were not strong enough to encounter the well-fortified British; so, after a second absence of twenty-four days, Captain John and his men were ordered home.

The next year the British removed their Newport garrison to New York, and there was no further call on the Bridgewater militia until July in 1780 when Admiral de Ternay landed six thousand French troops in Rhode Island. A British fleet was immediately dispatched to attack them, and the New England militia were summoned to aid the French. But they arrived only to find that the British ad-

miral had changed his mind and sailed back to New York without fighting. So Captain John's men marched home for the third time, covered with dust if not with glory; and as the scene of war was now shifted southward they were mustered out permanently.

During these three and a half years Captain John was away from Bridgewater on military duty less than three months; but he meantime contrived to serve in another, and perhaps more important, capacity by manufacturing flint-lock muskets which the American troops needed even more than shovels. He was officially commissioned "Gun-maker to the Province of Massachusetts," and toward the close of the War was promoted to the rank of Major. After the War he resumed the manufacture of shovels, and apparently found it profitable, for he became owner, or part owner, of the nail-making and iron-slitting works in the village and also owned the town grist-mill near his forge.

A thick, worn account book, kept by Captain John for many years, records various transactions with his neighbors apart from his regular business, and throws a sidelight on the village customs in his day. He owned two or three yokes of oxen and several horses, carts and carriages, or chaises. The oxen were hired out for plowing and hay-making; the horses for journeys, or for such emergency errands as "fetching the doctor for your wife." His teams were going regularly to Boston, Taunton and Newport to deliver shovels and bring back iron and other forge supplies, and the drivers apparently bought sundry articles for the Bridgewater folk in these larger towns. The book records that his neighbors owed him for numberless purchases,

such as "cloth for a green coat" (he also paid the local tailor for making it up), barrels of salt codfish, boots, gunpowder, casks of rum, a pair of spectacles and household furnishings of all sorts. He also advanced money, or its equivalent in credit, for such items as "board for your children while you were away, given Amos Fobes against your note of hand," "to rent paid for your house" and so on. He enters a "sixpence I gave my boy Oliver for finding your strayed cow" — perhaps the first sixpence Oliver Ames ever earned. All these charges were reckoned in pounds, shillings and pence until America adopted the decimal currency, but cash rarely changed hands. The debtors worked out the charges against them by labor at Captain John's forge or in his fields. When an account nearly balanced it would be closed by some such entry as "settled this day with Trueman Mitchell, he owing me 3 shillings," and the extra shillings would be carried forward to a fresh score. It is evident, therefore, that in addition to his other activities Captain John served Bridgewater as a kind of banker, merchant and livery-man, although he kept neither stable, store nor bank.

He lived to see the Treaty of Peace signed with Great Britain, the American Constitution adopted, the first Congress assemble, and Washington, John Adams and Thomas Jefferson serve as Presidents. He died six years after Washington at the age of sixty-seven, the father of seven daughters and three sons. He was buried in the "Old Graveyard" in West Bridgewater, but his bones and those of his wife were later brought to North Easton and now lie in Unity Church Cemetery.

THE FISHER AMES BRANCH OF THE FAMILY

DURING CAPTAIN JOHN'S LIFETIME TWO OF HIS NEAR relatives won national reputations — Dr. Nathaniel Ames as author of a popular almanac, and Nathaniel's son, Fisher, as orator and statesman. We speak of the latter's descendants as the "Fisher Ames branch of the family," though, with more modesty, we might, perhaps, call ourselves the branchers, for up to 1677 both had the same ancestors.

Our Captain Thomas Ames (1682–1737) of Bridgewater had an elder brother, Nathaniel, who was also an ironworker, but, strangely enough, took up astronomy as a hobby. His son, Nathaniel junior, became a physician and moved to Dedham where he had a large practice and also kept a tavern. Not content with these activities he followed his father's example and studied the movements of the planets, and six years before he left Bridgewater began to publish an annual 'Astronomical Diary or Almanack.' Almanacs were favorite reading in the Colonies, especially among the rural population, and an almanac was the first book printed in America. They gave the moon's phases, tides, eclipses, times of sunset and sunrise and attempted to forecast the weather. The still issued "Old Farmer's Almanac" illustrates the type, but the earlier ones also contained miscellaneous reading matter — poems, essays

and, especially, short, wise or witty maxims — both original and quoted. Dr. Nathaniel had a lively pen; and his Almanack, which he issued for forty-two years, outsold all others, even when Benjamin Franklin entered the field as a rival with his famous 'Poor Richard's Almanack.' Though of greater literary merit Franklin's had much the same arrangement and type of contents, and he unquestionably borrowed the idea from Dr. Ames.

Fisher Ames

Dr. Ames's second son, Fisher (1758–1808), so named for his mother's family, became a national figure. He was a precocious youth, advanced in Latin at six, and entered Harvard College when he was twelve. After graduating he taught for a time and practised law; but his inclination was toward politics, and he trained himself as an orator by studying the classics and the Bible to perfect his English style. Elected to the Massachusetts Legislature, he was a member of the delegation which ratified the American Constitution. The eloquence of his speeches and his readiness in debate led to his election to the first National Congress where he served with increasing distinction for eight years. A thorough-going supporter of Washington's administration, he was chosen to deliver the address when Washington retired. In 1796 he got up from a sick bed to make his most famous speech in support of Jay's Treaty with Great Britain, which officially ended the Revolutionary War. There was strong opposition to this treaty in Congress, and Fisher Ames is credited with having forced its passage. His speech was so effective that when he sat

down an opponent moved to adjourn that the hearers might recover from its spell before they cast their votes. Ames then retired to his farm in Dedham; but when Washington died he was recalled to deliver a eulogy before the Massachusetts Legislature.

In 1804 he was elected President of Harvard College, but decided not to serve because of failing health. He was, therefore, the second Ames who, but for illness, might have been a Harvard president, and one relative in the Ames-Angier line, Rev. Urian Oakes, did fill that office.

THE AMES–ANGIER DESCENT TO SUSANNA ANGIER

OLIVER AMES, OF THE NINTH GENERATION, WHO brought our family to Easton, was the youngest of Captain John's ten children and the first Ames to be called Oliver. As he was born at the height of the Revolution when English kings were especially unpopular I imagine he was named for Oliver Cromwell who beheaded Charles I. and turned England temporarily into a Commonwealth. He was educated at the Bridgewater school; and during the long vacations — school terms were short in those days — doubtless helped to make shovels at his father's forge even as a boy.

His brother David, nineteen years Oliver's senior, had meantime become an expert iron-master; and when, in 1794, Congress enlarged the United States Arsenal at Springfield, Mass., where munitions had been stored during the War, by adding an Armory to manufacture them, David Ames was chosen to administer it as its first Superintendent under a commission from President Washington. The Armory, of course, offered an opportunity to practise the iron-worker's trade on a highly elaborate scale; and when Oliver was eighteen he joined his brother in Springfield and worked there for five years till the end of David's term in 1802. He then returned to Bridgewater and shovel-making, and probably took charge of his father's plant, since Captain

John was now growing old. But evidently he had not forgotten his home town in the interval, for the next year he married Susanna Angier, the daughter of Oakes Angier, a neighbor.

By an unusual chance this marriage joined two branches of the Ames family — one descended through the female line from different, though undoubtedly kindred, English ancestors.

Two years after the first William Ames left England Susanna Angier's great-great-grandmother, Ruth Ames, a girl of eighteen, also sailed for America in charge of her mother. On May 11, 1637, the register of the Port of Yarmouth, England, shows the following 'sailing permit':

"Joane Ames of Yarmouth, Wydow, ageed 50 yeares, with three children, Ruth ageed 18 yeares, William and John. Desirous to passe for New England and there inhabit and remaine."

This Joane Ames was the "wydow" of William Ames, doctor of divinity, the most famous Puritan theologian of his day. He was the son of William Ames of Ipswich, England, whose occupation was 'merchant adventurer' — that is, either an individual shipowner or a shareholder in one of the companies that fitted out fleets when English vessels adventured for trade to all coasts of the Seven Seas. A biographer, writing in 1776, calls the father "a member of the ancient family of Ames which now remains in Norfolk and Somersetshire."

William Ames, D.D.

His eminent son, William (born in Norwich, England, in 1576) was educated and ordained for the ministry at

Christ Church College, Cambridge, and continued to reside and teach there as a Fellow till he was thirty-three. But he had meantime imbibed the doctrines of Calvin, and became an extreme Puritan. He refused to wear the surplice of the Church of England; and finally preached a sermon in which he denounced card-playing and other such sports as inventions of the Devil, and inveighed so strongly against the Christmastide revels of the undergraduates as pagan that the authorities determined to expel him. He avoided this by a hasty resignation; but his writings had already made his reputation as a theologian and philosopher, and he was asked to take charge of a Calvinist church at Wrentham. But all non-conformist preachers were then being harried out of England, and William Ames fled to the Puritan refuge, Holland. He lived for a while at The Hague; but was shortly invited to fill the Chair of Theology in the now defunct but then famous University of Franeker. Here for about twelve years he taught and wrote, mainly expounding and defending the Calvinist creed. Students from England, Hungary, Poland and Flanders flocked to sit under him; and his tracts, smuggled into England in spite of a penalty of £1000 imposed by Archbishop Laud on anyone found to possess them, became the Puritan textbooks, and were particularly esteemed by the New England clergy.

Harvard College had not yet been founded, but the Massachusetts Colony already felt the need of some local institution to educate its young preachers; and with this in mind Governor Winthrop, with whom Ames was connected by marriage, wrote urging him to come to America. Ames answered with prayers for the success of the new

settlement, and expressed his intention "to take the first convenient occasion of following after." Morison, the historian of Harvard, writes: "There can be little doubt that if William Ames had lived he would have been offered the first Harvard presidency."

But his health was failing, and, says his biographer, he was "so much troubled with the asthma in the sharp air of Franeker that he concluded every Winter there would be his last. And he was also desirous of preaching again to his own countrymen." He therefore resigned his professorship in 1633 to take temporary charge of the English church at Rotterdam before sailing for America. However, the change of air did him no good, and he died before the end of the year.

His biographer calls him "a pattern of holiness, a burning and shining light, a lamp of learning and arts and a champion of truth." "He was," says Morison, "the spiritual father of the New England churches. . . . His influence on the early Harvard curriculum probably exceeded that of any other scholar. When we consider that his works in logic, divinity and physics were used as textbooks at Harvard and Yale it would seem more than a coincidence in finding both the Harvard mottoes 'Veritas' and 'Christo et Ecclesiae' and the Yale motto 'Urim & Thummim' on the title pages of his treatises." John Harvard's library which he bequeathed to the College contained eight of Dr. Ames's books.

His esteem in New England, and his intention to remove there probably influenced his widow Joane to sail for America soon after his death. She was his second wife (he had no children by his first) and came of a distinguished

family. Her father, Giles Fletcher, author and diplomat, was Queen Elizabeth's ambassador to Russia. Both her brothers, Phineas and Giles, were poets of reputation; and the dramatist John Fletcher, of Beaumont and Fletcher, was her cousin.

Joane was fifty years old when she bade good-bye to her relatives in England, and, with her three children, embarked on the ship 'Mary Ann' of which Master William Goose was captain. She brought along her husband's valuable library, either with the intention of giving or selling it to Harvard, and his portrait painted in Franeker when he was fifty-seven. It represents the Doctor as rather forbidding of countenance, and wearing a black skull-cap with a ruff about his neck. It is probably the oldest portrait owned by Harvard University, and, numbered 1, hangs in Memorial Hall.

Although the Massachusetts General Court honored Ames's memory by making his widow a gift of £40 soon after her arrival, Joane's early years in New England were unfortunate. She settled first in Salem and then moved to Cambridge, where, writes Cotton Mather, "having her house burnt and being reduced to much poverty and affliction, the charitable heart of Mr. Hooker [an eminent Puritan clergyman who had studied with her husband in Holland] and others that joined with him, comfortably provided for her and her children." It may be that her husband's books were burned with her house, or, like all but one of John Harvard's, were destroyed when a fire swept the college library for there is no record of them.

After living seven years in New England Joane died in 1644, and she probably lies in the first Cambridge burying

ground in Harvard Square; but no stones mark the graves of those interred there so early. The parish death record spells her name Aimes despite her husband's fame.

Her young sons, William and John (their names, curiously enough, the same as those of the Ames brothers who had come two years earlier from Bruton) were educated at Harvard. Both, however, returned to England before they married, and left no American descendants. William became a minister and preached in his father's former parish till he too was ejected for non-conformity. John became a 'merchant-clothier' of sufficient importance to have his memoir written.

Disraeli the elder, in his 'Curiosities of Literature,' preserves a story of how this John Ames decided the future occupations of his four sons. "The boys" he writes "were standing under a hedge in the rain, and a neighbor overheard and repeated their conversation. One wished it would rain books for he wished to be a preacher, another wished a rain of wool to be a clothier like his father, the third money to be a merchant and the youngest plums to be a grocer. The father took these wishes as a hint, and chose for them these different callings, in which it appears they settled successfully."

Ruth Ames and Her Angier Descendants

Joane's daughter, Ruth Ames, remained in Cambridge and married Edmund Angier of that town, a man seven years her junior who had come from England and set up a draper's shop opposite his dwelling on the corner of Dunster and Mt. Auburn Streets. His father, John Angier of Dedham,

England, is described as "a person of good account and property." Ruth, who died in 1656, bore her husband six children. He married again and had fourteen in all.

Her fourth son, Samuel Angier, carries on our line. Like his grandfather and uncle he was educated for the ministry — for the Angiers seem to have turned parsons as habitually as the Ameses turned to iron manufacture. He graduated from Harvard in 1673, and preached first at Rehoboth (the little village on the main road between North Easton and Providence) and later at Watertown. He married Hannah Oakes, and thus brought the name Oakes into the family.

Urian Oakes, President of Harvard College

Hannah's father, the Rev. Urian Oakes, was fourth president of Harvard, and famous in his day. He was born in England, brought to America in childhood, and educated for the ministry. While still a student at college he worked out and published an intricate set of astronomical calculations. He then returned to England and preached till silenced for non-conformity; but he had meantime gained such a reputation that the Cambridge church sent a special messenger abroad to invite him to return and become their pastor, which he did. In 1675 he was made "head" of Harvard College, but continued in his pastorate for five years till he took over the full duties of the presidency. He was called "the greatest master of pure Ciceronian Latin ever in America." He also wrote long, didactic poems in Latin and English, much esteemed in his day. I have read some of the latter. It requires effort.

The Latin epitaph on his tombstone in the First Church graveyard in Cambridge reads in part:

> He was the very learned father of the Orthodox Church at Cambridge and the indefatigable president of Harvard College, having won high renown for piety and erudition. Snatched away by a sudden death, he breathed out his soul into the bosom of Jesus the twenty-fifth of July, 1681, in the fiftieth year of his life.

His daughter Hannah's husband, Samuel Angier, was not quite so prolific as his father for he had only thirteen children. Our line follows their sixth son, Rev. John Angier, who graduated from Harvard, taught school for a while in Plymouth at a yearly salary of £20, and, in 1724, became the first pastor of the newly incorporated parish of East Bridgewater, Mass., near where the other branch of the Ames family was already settled. He preached in that town for sixty-three years.

His fourth son, Oakes Angier, named for his maternal grandfather, broke the family tradition and became a lawyer. Graduated from Harvard at nineteen, he read law with John Adams who later succeeded Washington as President, settled in West Bridgewater, and became so eminent in his profession that he gained a more than local reputation. Several chairs from a dining-room set sent him from England by a grateful client for winning a lawsuit have been handed down in the Ames family.

It was his daughter, Susanna Angier, who joined the two descents by marrying young Oliver Ames.

OLIVER AMES COMES TO EASTON

THIS HAPPENED IN 1803, A MEMORABLE YEAR IN America's history, for the young nation then made its first great territorial expansion when President Jefferson paid Napoleon Bonaparte fifteen million dollars for the Louisiana Purchase, which more than doubled the original area of the United States.

Immediately after his marriage Oliver, as was the custom in those days, determined to set up in business for himself. His father had found shovel-making a promising trade in the rapidly growing region, and Oliver looked about for some place where he might continue it on a larger scale. Sufficient water power was, of course, the first requisite, for it was half a century before steam was to come into general use. He learned that there was a water privilege for sale on the Queset River in the neighboring village of Easton (a 'privilege' carries the right to use a fall for motive power provided the owner does not interfere with the water supply of others) and a few months after his wedding drove from West Bridgewater in his two-wheeled chaise to inspect it. The road was only a rough cart path; and as Oliver neared his destination he checked his horse on a plank bridge laid across the stream where it still runs under Main Street near the Library.

I wish he might have foreseen, as he sat there, the changes his coming was to bring about on that spot — behind him

a High School, a Memorial Town Hall and a Library, all bearing his name; on his right a double rank of massive granite shops, and, just beyond, his office and future homestead with the spire of the family church rising above them. But he said that then the trees grew so close to the bridge that their branches brushed the sides of his chaise, and there was but one farmhouse visible.

Turning right with the path he stopped at the lower end of what the villagers then called the Trout Hole, and we know as the Shovel Shop Pond. Here, ten years before, Eliphalet Leonard, a descendant of ironsmiths who had worked with Oliver's great-great-great-grandfather in Braintree, built a dam, a forge and a shop for making nails. He failed, however, and his properties passed to a creditor in Bridgewater from whom Oliver learned of them.

Oliver probably explored the river for other water powers. At any rate Easton seemed to him a favorable place to begin in his own shovel-making, and, on August 1, 1803, he bought the Leonard shops, a small dwelling house across the way and some adjacent parcels of land for sixteen hundred dollars — dollars worth more than twice that sum today. He gave the dwelling house, which still stands, a coat of paint (it was much admired as the first painted house in town) brought his young bride there, and settled down to his life work. He was then twenty-four and she was twenty.

The Queset River

It is because of the Queset River, therefore, that the family happened to be brought to Easton instead of else-

where. The stream dates from the last glacial period. All New England was then covered with a gigantic iceberg, which, as it crept southward, pushed before it a succession of great ridges of sand and gravel, called moraines, and left them behind as it melted away. It also tore great boulders from the granite hills to the north and strewed them carelessly about in Easton, together with such a general litter of rocks and stones that the farmers were accused of having to sharpen a sheep's nose before it could graze. As the post-glacial stream cut its winding way through North and South Easton to join the Taunton River it dropped from level to level of the moraines; and these falls served to turn the wheels of several grist- and saw-mills — the first needs in a new settlement.

Indeed the stream's original name was Mill River, and the change to Cowesset, later shortened to Queset, came about through a curious mistake. Two streams flowed from the westward through the town of Bridgewater. One of them rose in what is now Easton, the other in Norton; and the Indians called the latter 'Cowesset' — the name of a local tribe, which means "place of little pine trees." But the Bridgewater folk, who had not yet explored this still unsettled region, confused the two and gave the Cowesset name to the stream from Easton. Several of the earliest assignments of land in Easton were to Bridgewater men, and whenever their lots touched the river they called it by its Bridgewater name in their deeds. Gradually it came to be known everywhere as the Queset instead of Mill River, and has now borne the name for well over a century.

Once a sizable stream in flood, as its wide natural bed

shows, the Queset has been so reduced by storing the water and by side canals as to seem, mainly, a link between a series of ponds. Flowing from Long Pond it is joined by a brook from Flyaway Pond (so named from its unfortunate habit of drying up in summer), then connects Hoe Shop Pond, Shovel Shop Pond and Stone's Pond at 'Langwater,' and flows thence through the meadows into other ponds in South Easton. But all these are only artificial reservoirs made by a successive series of dams.

Fifty years ago, however, the river threatened to sweep away all such man-made obstructions and take its old free course again. One February night in 1886, after a series of heavy rains, the Long Pond flood-gate proved insufficient to let the surplus water escape. It poured over the dam and began to seep through it. If it had given way and loosed the whole body of water in the brimming pond the stream would have broken through the lower dams and undermined bridges, factories and dwellings as far as South Easton. The danger was only realized about midnight. The shop bell was rung, men assembled, and, in a drenching rain, load after load of hay, weighted with stones and sand, were dumped inside the leaking dam. It was daylight before it was made safe; but enough water had meantime overflowed to cause serious washouts down the stream.

When Oliver Ames first came to Easton the Queset turned the wheels of at least eight mills, forges or factories in its course through the town; but steam supplanted water, electricity now bids fair to supplant steam; and, as I write, the last of these water-wheels stands idle.

The Easton township was originally part of a great tract, covering nearly fifty square miles, early deeded by the Indians to Plymouth Colony, which would also include the present towns of Mansfield and Norton. In 1668 a group of Taunton citizens purchased it from the Colony in joint ownership, much as the men from Duxbury had acquired their Bridgewater land nineteen years before. It lay north of Taunton, and was called the Taunton North Purchase. The first settlers, less than a dozen families all told, bought lots near the western edge of the tract, and about 1694 began to build houses on or near the Queset River in what is now South Easton village — or, to give it its old name, 'the Green.' They probably chose this site because it had once been an Indian clearing, and various Indian relics have been ploughed up thereabouts. The little settlement grew slowly, more slowly than the neighboring village of Norton though that was started later; and presently a Norton township was established which also included Easton. But the Easton folk found it inconvenient to journey to the Norton church for worship; and when they were numerous enough to hire a minister and build a primitive meeting-house of their own (it had no glass yet but only oiled paper in its windows) they petitioned the General Court to make them a separate town, saying that they now had "between forty and fifty families who are under great difficulty in attending their public duties in Norton."

The Court granted their plea, and on December 21,1725,

enacted that the precinct "be, and hereby is, sett off and constituted a separate township by the name of Easton . . . and that the inhabitants of the same do, within six months, procure and pay a schoolmaster to instruct their youth in writing and reading, and that thereupon they be discharged from any payments for the maintenance of the school at Norton." The name of the new town was only a natural shortening of 'East Norton,' or 'East Town,' as it had already come to be called.

The history of Easton before Oliver arrived is neither unusual nor eventful. William L. Chaffin's painstaking 'History' (to which I have been constantly indebted) gives it in full detail. The early town was a small, poor and somewhat backward community. For years the Eastonites calmly disregarded the order to provide a schoolmaster, and then beat the Devil about the bush by offering an annual salary of only three pounds for a teacher who must "keep schools in his own house and find his own diet," a bid that naturally attracted no candidates; and for thirteen successive years repeated the same munificent proposal with the same result. Even when, in 1743, the County threatened to fine the town for this neglect it rose to the occasion, and instead of voting anything for a schoolmaster's stipend decided to pay the smaller fine for not doing so — a thrifty compromise. Indeed it was not until a quarter of a century after its settlement that Easton furnished its children with any adequate schooling.

The town was normally patriotic during the French and Indian Wars and the Revolution; but the chief local excitement was a religious squabble which lasted for years.

Beginning as a disagreement about the location of a new meeting house it grew into a quarrel that split the parish into factions, divided families and resulted in such pious practices as rioting during services, refusing to pay the parsons' salaries and finally left the town with no church at all for a considerable period.

Easton as Oliver Found It

In 1803 when Oliver Ames first came to Easton it was a small community, mainly of farmers. There were some hundred and seventy houses scattered throughout the township, and a total population of about fifteen hundred men, women and children. There were almost as many barns as dwellings, more oxen than horses and five hundred cows and double that number of sheep grazed on its stony pastures. The river turned several saw and grist mills. One of the latter was in North Easton a few rods southeast of the present National Bank building on Main Street, and its dam formed a pond in the meadow above. When Oliver arrived this mill was run by a vigorous old widow, known to everyone as 'Aunt Lucy' Randall. Oliver bought it, and for a time continued to grind the village corn and wheat there.

Deposits of bog-iron ore had early been discovered in several parts of the town. There was one on Lincoln Street near Lincoln Spring, and another in the Picker Field, so named from a cotton-picking machine later operated there. The presence of this ore led to the establishment of several forges, and in 1803 there were three of these — the one which Oliver bought at the Shovel Shop Pond, another on

Quaker Leonard Road and a third in the Furnace Village. The latter, which dates back to about 1752, still makes castings, and is the oldest continuing industry in town.

The forge on Quaker Leonard Road was built by another member of the famous Leonard family of ironsmiths, and during Revolutionary days its founder succeeded in producing a small quantity of steel — the first, it is said, ever made in America. His Quaker son, Jonathan Leonard, from whom the road was named, was operating this forge in 1803, and could then turn out three-ton batches of steel at a casting. Jonathan himself tells of how he borrowed (or stole, pious Quaker though he was) an improved method of steel-making from a foundry in Pennsylvania. The formula was strictly guarded; but by pretending to be simple-minded, and so not capable of understanding the process, he succeeded in getting employed in the secret part of the plant. The Quaker Leonard forge was discontinued soon after Oliver reached Easton.

In those days the town's important highway was the Bay Road. Following an Indian trail it had been opened as a road for more than a hundred years to provide a through route between New Bedford, Taunton and Massachusetts Bay. Stagecoaches carrying passengers and mail to and from Boston trotted along it, as well as slow wagons and ox-wains loaded with produce. It was dotted with taverns where travellers might pause to eat and drink. When Oliver first went from Easton to Boston he either took a Bay Road stage or drove in his own chaise.

The only town post-office was on this road in a cottage south of the Furnace. All the villagers had to go there to get

their scanty mail; but they might drop out-going letters in a covered box set on a post at the junction of the Bay Road and Lincoln Street where it was collected by passing mail coaches. There was no post-office in North Easton till thirty years later; and Oliver's son, John, was its first postmaster.

In spite of the importance of the Bay Road the town fathers seem to have been too parsimonious to keep their share of it in repair, and the year Oliver arrived Easton was fined by the County for this neglect.

The town had now two schoolhouses, one at the Center and one in North Easton at the north end of Main Street. Both were unpainted one-room structures, and the same teacher sometimes served both in alternate sessions.

There were two churches, the Orthodox at the Center and the Methodist at the so-called 'Dark Corner' where Elm meets Washington Street. The clergyman of the Congregational Church was the aged Rev. William Reed who had now preached there for nearly twenty years, and when ordained had mounted the pulpit dressed in Colonial fashion with knee breeches, white stockings, silver shoe-buckles and a powdered wig. The Methodist Church depended on 'circuit' preachers, and services were not held there regularly till seven years later when a resident parson, the Rev. John Tinkham, was installed. He received his salary, not in money but in contributions of provisions, hay, food and cider from his flock, and one parishioner paid pew rent with a small, live pig. Beside preaching Mr. Tinkham eked out a living as a stone-mason. He frowned on all frivolity, and once refused to allow two ladies to attend a service till they had

ripped the bows from their bonnets. He did, however, sanction the use of a bass viol to lead the congregation in singing, though this was considered such a profanation that when it was first played several marched out of the meeting. Neither church was painted or heated, though in the coldest weather some parishioners brought their own foot-warmers. The Orthodox had high-backed, square pews; but in the Methodist the seats were merely oak slabs with bark on the under sides.

In 1803 Easton still disposed of its infirm and aged paupers by selling them to the lowest bidder who would contract to lodge and board them for life — therefore the sooner they died the more profit there was in the transaction. Young paupers, or poor orphans who had no relatives to care for them, might be 'bound out' during their minority to someone who, in return for their labor and a small dole from the town, guaranteed to provide them with food, clothing and schooling.

Though the church squabbles seem to have involved most of the villagers they were not all religiously inclined, for Easton was the headquarters of a notorious gang of thieves who stole horses and robbed stores and houses for miles around, and were the terror of the neighborhood. They had a secret hideaway in the deep woods off the Bay Road near the Stoughton line where they built a large cellar, or covered excavation, in which they cached their booty. The leader of the band, George White, was such an accomplished rascal that he boasted of having stolen a horse and and so disguised it by clipping its mane and tail and painting its coat that he sold it back to the same farmer from whom

he took it. He had previously been convicted of horse thieving, and hid the letters 'H T' (horse thief) branded on his forehead by wearing his hair in a long bang. The gang was still active when Oliver first came to Easton; but shortly afterwards their hiding place was discovered and they were dispersed. White was captured, and sentenced to sit in public view on the gallows in the Taunton jail with a hangman's rope looped about his neck as a warning, then to be whipped twenty strokes on his bare back and finally to serve five years at hard labor.

OLIVER AMES, AND THE ESTABLISHMENT OF THE SHOVEL WORKS

I FIND IT DIFFICULT TO IMAGINE OLIVER SENIOR, THE founder of the Easton shovel factories, except as a rather stern and imposing old gentleman because I always picture him from the familiar bust made thirteen years after his death. This bust was modeled by the sculptor Truman H. Bartlett from daguerreotypes taken when Oliver was about seventy, and is said by those who knew him to be an accurate likeness, not unduly flattered. Broad-shouldered and erect, he stood over six feet even in old age; and, with his long broadcloth coat, white stock and ebony cane, his partially bald head protected by a wig, made so striking a figure that people turned to look after him in the street. So it takes an effort to visualize him as a vigorous young man only just turned twenty-four when he arrived in Easton and set up in business for himself. Even then he must have been notable for the dominance of his face, his height and his extraordinary strength.

His energy and adventurous courage matched his physique. He invested his savings, as well as a sum borrowed from his elder brother David, in the Leonard shops and land; and, as soon as he had equipped the forge with trip-hammers, began, with a small crew of workmen, to make shovels branded 'O. Ames' — a brand he lived to see known and respected throughout the country. The first recorded date of his activities in Easton is from an old account book

of Ziba Randall, a local teamster, who charged him one dollar for carting six dozen shovels to Boston on April 15, 1805. Those he made before this he probably took to Boston himself. On one of his first trips he loaded a cart with a few dozen, and driving alongside in his one-horse chaise, took them to Boston to sell. But the hardware dealers distrusted tools which were lighter than those they imported from England although Oliver assured them his would prove as durable, adding a phrase he was fond of repeating all his life, "iron is cheaper than muscle" — a saying which anticipates Thomas Edison's famous dictum "all human beings are born lazy; any invention which saves labor will succeed." So Oliver drove back to Easton with most of his wares unsold, but stopped at every prosperous-looking farmhouse by the road to give the farmer a shovel, asking only that if he found it better than those he had been using he should in future inquire for the 'O. Ames' brand.

The market for his shovels increased slowly at first, but Oliver had faith in the future, for when in 1805 his father died and he inherited the forge and grist-mill in Bridgewater he took over the forge as an additional shovel-making plant and also carried on the grist-mill. Not content with these activities he and a fellow townsman, Asa Waters, leased another Easton water privilege, which we now call the Hoe Shop dam, and began to manufacture hoes in a wooden blacksmith shop there.

He Goes to Plymouth

Perhaps these ventures exhausted Oliver's small capital. At any rate, four years after he settled in Easton he had an

offer from the then important Plymouth Iron Works, managed by Captain Nathaniel Russell, to set up a shovel-making department in their plant with a commission on every dozen turned out and with an opportunity to apply his mechanical skill in improving the various tools and machines manufactured by the Company. He accepted; and in 1807 moved to Plymouth with his wife and two young sons, Oakes aged three and Horatio two, who had meantime been born in Easton.

The Plymouth Iron Works were on Town Brook behind Summer Street, and their wide lower dam still spans the stream. The site had been previously occupied by Martin Brimmer, a pioneer industrialist for whom Brimmer Street in Boston was named, and who, about 1792, had built an iron rolling mill and a slitting mill, and there made the first American attempt to produce illuminating gas. Brimmer also built the wooden dwelling, known as the 'Long House,' which still stands nearby on Summer Street. In this house Oliver Ames lived during his stay in Plymouth, and here three more sons were born to him — Oliver junior in 1807, Angier (who died in infancy) in 1810, and William Leonard in 1812.

Oliver remained in Plymouth for seven years; and busy years they must have been, for, in addition to his services with the Plymouth Company, he continued to operate his own shovel-making plants in Easton and Bridgewater and to manufacture hoes. He shipped the not inconsiderable number of eight hundred hoes from his little shop to Boston during three months in 1808. He also invented, now and later, various mechanical devices, not only to improve

shovel-making but for other uses, and was granted patents for a water-back furnace, a tuyère for a blast furnace, a new method of lifting trip-hammers (the patent is signed by President Madison), an iron wheel-hub and a back-strap shovel (patent signed by President John Quincy Adams).

The War of 1812

It seems incredible that the personal ambitions of a stout little Corsican in France should now have affected the fortunes of Oliver Ames, shovel-maker, in a small New England village three thousand miles across the sea, but such proved to be the case. By 1807 Napoleon had made himself master of all continental Europe except Prussia and Russia. He next sought to cripple England, his implacable enemy, by strangling her commerce, and declared any vessels trading with her subject to seizure as prizes of war. Great Britain retaliated by closing the Continent to all neutral ships which had not first paid harbor duty and obtained fresh clearance papers in some English port. To maintain her mastery of the sea she was also obliged to enlarge her navy; but, as life on a British man-of-war was an almost intolerable slavery, English sailors fled in considerable numbers to take service on American merchantmen. England then asserted her right to stop and search all foreign vessels, not only for contraband goods but to recover these deserters, and even stationed warships outside American harbors for this purpose.

Up to now United States cargoes had been protected by her neutral flag, and ship owners, especially those of New England, had taken advantage of Europe's imbroglio to build

up a brisk transatlantic commerce. But these decrees so greatly increased the hazards of shipping that Congress, though unprepared as yet to make the situation a cause for war, was stirred to act, and in 1808 passed bills prohibiting the export of all American products to any of the belligerents. The real purpose of these bills, ostensibly intended to avoid international complications by safeguarding American ships from seizure, was to deprive England and the Continent of American food-stuffs and cotton, and so force Napoleon and Great Britain to revoke their embargoes. But while these were in effect it became increasingly dangerous to send American ships abroad. Therefore, although the profits from a successful voyage were correspondingly large and a considerable number of vessels still ran the risks, there was a great decrease in transatlantic shipping, and the prices of all imported commodities doubled and trebled.

But "'tis an ill wind that blows nobody good." English wares — shovels and machinery among them — had heretofore so successfully competed with those made in America as to prevent any rapid expansion of American manufacturing. But when the inflow of these was either cut off altogether or their cost made prohibitive American factories grew busier than they had been since the years following the Revolution; and Oliver's shovel works, both in Easton and Plymouth, prospered. It now seemed to him a propitious time to establish another home industry — cotton-yarn spinning. Heretofore, almost all the cotton cloth used in America had been woven in England; but, with importation throttled, he believed a domestic textile mill might prove profitable, and decided to build a yarn factory in

Easton, with Asa Waters again as his partner. He would make the necessary machines and tools in Plymouth. Apparently the same idea occurred simultaneously to several others, for, while in 1807 there were but fifteen cotton mills in the United States, in four years they had increased to eighty-seven; and Oliver records in his day-book that in Plymouth he built cotton machinery not only for his own venture but for others.

From 1809 until the end of the War of 1812 American manufacturing flourished as if under a forced draught. In 1812 public feeling became so inflamed by the high-handed doings of the British, who treated the Atlantic as if it were an English lake, that Congress was forced, though only by a divided vote, to declare war. It turned out to be but a small-scale conflict — though, if it must be confessed, all wars have proved profitable to the shovel trade. England was still too engaged with Napoleon, and the United States too unprepared, to enter into the struggle whole-heartedly. The few land battles were scattered and unimportant; and, though the British made a spectacular raid on Washington and burned the White House, the Americans countered by astonishing them with a series of brilliant naval victories on the Great Lakes and elsewhere. Nothing substantial was gained or lost by either side, however, and both welcomed the Treaty of Peace, which was signed in Ghent in December, 1814. At least all Americans welcomed it except the manufacturers, for, as Oliver Ames wrote in his day-book, "the Peace spoiled business." Free shipping was resumed, and a long-stored stock of English merchandise was dumped upon the American market at sacrificial prices.

The effect on the Plymouth Iron Works was disastrous. It seems an incurable failing of business men to believe that periods of prosperity will continue indefinitely; and the Plymouth Company suddenly found themselves overstocked with tools and machinery for which there was no demand. So serious was their situation that the works were shut down almost immediately with no prospect of reopening.

Oliver Returns to Easton

But Oliver Ames had already planned to return to Easton and devote himself wholly to his own undertakings there. He began to build the cotton-spinning factory in Easton in 1813, the year before the end of the War, and also bought the hoe shop where he and Asa Waters, under the firm name of Ames & Waters, were still making hoes. In the same year he purchased a large tract of land surrounding the site of his future house and started to build that. So the closing of the Plymouth Works only hastened his return to Easton by a few months. He records the date as March 25, 1814.

He was now thirty-five, and his sons, Oakes, Horatio, Oliver junior and William, were ten, nine, seven and two respectively. The house he was building for this young family is the well-proportioned four-square dwelling which still stands on Main Street, though not improved in appearance by the porch, piazza and cupola added many years later. It was only partly ready when Oliver arrived. "I moved into the north part of it," he writes, "but it was not yet plastered. I lived in that part until the next September while the south part was being finished and then moved

into that." In this house three more children were born to him, Sarah Angier in 1814, John in 1817 and Harriet in 1819.

Of his new cotton factory, a frame building on the site where the Ames machine shop now stands, he writes at the same date, "it was now ready to operate with a spinning frame and apparatus."

The outlay for this factory, the hoe shop, the land and his house, all at about the same time, must have made considerable inroads in Oliver's capital in spite of his prosperity during the previous five years. He had, moreover, assumed, and now had to pay, certain notes endorsed by his father which the signers found themselves unable to meet owing to the depression. He was operating two shovel plants, one in Easton and one in Bridgewater, a hoe shop and a cotton factory. A rival hoe manufactory had recently been started in nearby Plimptonville; there was no market for cotton yarn, and English shovels were again competing with the 'O. Ames' brand.

For several years thereafter Oliver found himself in financial straits. He was obliged to ask long credits of the dealers who supplied him with steel and iron, and of the farmers who furnished charcoal for his furnaces and wood for his handles. In 1815, as an additional misfortune, his cotton factory burned. Many friends now advised him to go through bankruptcy, but this he steadfastly refused to do, and with characteristic doggedness rebuilt the factory at once. Only his reputation for honesty, vigor and business acumen enabled him to weather the storm. Most of his creditors, however, had such faith in his word and ability

that they not only granted him time to meet his debts but some of them offered to lend him money.

His first move was to discontinue making hoes, for competition had divided that market, and he refitted the hoe shop as a shovel plant. It was generally thought he was unwise in this. A farmer wore out at least four hoes to every shovel; and, as farmers were then the chief buyers of shovels, it seemed as if the output must always be limited. No one then could have foreseen the great demand which was to spring from the building of railways (the first line was not begun till fourteen years later) the discovery of mines and the settling of the West.

In 1815 Oliver sold a quarter interest in his cotton factory, and formed a partnership to operate it with Col. David Manley as manager. He writes in his journal that Manley so mismanaged the enterprise that after holding on for several years he was glad to sell his share for about a sixth of his investment although the sacrifice cost him eight or nine thousand dollars. The firm went bankrupt in 1826; but perhaps its failure was not wholly attributable to Manley, for only one or two of the many cotton-spinning and weaving mills established during the War of 1812 managed to struggle through to success.

Oliver was now rid of all his ventures except shovel-making, and to this he devoted himself exclusively thereafter. He made it the rule of his life never to let an inferior tool leave his factory; and gradually his shovels became recognized as not only the best made in this country but as superior to those imported from England. He used to tell with relish of one dealer who refused to buy Ames shovels,

saying that they could not equal the English sample he exhibited, and was disconcerted to find that what he believed an imported tool was stamped 'O. Ames.' But it was six years before Oliver thought it prudent to again enlarge his plant. In 1822–23, however, he bought an interest in a water privilege at South Braintree and built an additional shop there. The stream had never before been used for power, and the forest trees had to be cleared for the dam.

The Growth of the Country and of the Shovel Works

Captain John Ames had seen his country fight its way from a British Colony into an independent Republic. During the half-century after the War of 1812 his son Oliver watched it develop from an unimportant agricultural nation into a commercial rival of Europe — a rapid expansion without parallel in history. When he returned from Plymouth to Easton the United States was sparsely populated. Most of her people lived in small farming communities near the Atlantic seaboard. The Far West was still foreign-owned and had been explored only by a trickle of pioneer adventurers. Land transportation was solely by horse or ox-drawn vehicles and over dirt roads often made nearly impassable by thaws or snow. Ships still moved by favor of the wind, though steamboats were being experimented with. The water-wheel was the sole source of mechanical power, and wood or charcoal the usual fuel, for it was costly to import coal from England.

But during these fifty years Oliver saw the population of the country increase from less than eight and a half millions to over thirty-three and a half millions. By the treaty of

1848 which ended the Mexican War the United States extended its boundaries to the Pacific Ocean, adding the vast territory of Texas, New Mexico, Arizona, Utah and California to its domain. Over fifteen million people settled west of the Appalachian Mountains. The towns of the Eastern and Middle States were connected by durable highways, and numerous canals were opened for inland trade by water. The first steamship crossed the Atlantic, and steamboats began to rival sailing ships. The new telegraph carried messages with lightning speed. The steam-engine supplemented or supplanted the water-wheel. Thousands of miles of steam-railways were built to transport goods and passengers in the east, and there was talk in Congress of a national railroad which should cross the Rocky and Sierra Nevada Mountains and link the Atlantic and Pacific. Gold was discovered in California; lead, silver and other metals were found in the western states; and Oliver burned coal and used iron mined in Pennsylvania. He saw the anti-slavery issue split the North and South, watched the Civil War wage for two years and the tide turn in favor of the Union forces; and before he died Lincoln had proclaimed the emancipation of the slaves.

The first substantial increase in the demand for shovels came from road building. Early dirt roads were merely leveled after the spring thaws by dragging heavy logs over them and quickly rutted again. Then an ingenious Scotchman, named McAdam, discovered that by spreading a foot-thick layer of broken stone over even a soft foundation a smooth highway might be constructed which grew stronger with time and could easily be kept in repair. The embargoes

on shipping before and during the War of 1812 had brought keenly home to Americans the need for better inland transportation, and the building of these 'macadam' roads, as they were called, began. The first ran from Philadelphia to Lancaster, Pennsylvania. It was privately financed, and a toll was charged for its use. Both ends were stopped by long, hinged poles, or 'pikes,' swung across the highway and turned aside to admit a wagon, stagecoach, or horseman when the fee had been paid. Such toll-roads were therefore called 'turnpikes.' Their success was immediate. Companies were formed to build them everywhere, and by 1821 at least twelve hundred miles of macadam roads connected the principal towns and cities in the East. And shovels were needed to dig the roadbeds and spread the stone.

The increase of inland commerce stimulated the search for still other means of transportation, and what is known as 'the canal-building period' followed. The first, and most important, canal was the 'Great Erie' which linked the Atlantic with the Great Lakes by an uninterrupted waterway from the Hudson River to Buffalo. Begun in 1817, it was opened in sections; and when, after eight years, it was finally completed the cost of carrying a ton of merchandise from Buffalo to New York by water instead of overland fell from one hundred to less than eight dollars. The success of the Erie raised a clamor for other canals; and before 1830 four thousand miles of such waterways had been finished and nearly seven thousand more were under construction or planned. Hardly, however, had the grass had time to grow on their tow-paths when most of them were made obsolete by the coming of the railroad. But Ames

shovels were needed in quantity to excavate them, for (by the temporary grace of Providence) the steam dredge had not yet been invented.

The first experimental railroad was built by the Baltimore & Ohio Railroad Company. It had double tracks laid side by side, and was opened in 1830 by a race between a wood-burning locomotive drawing a single car loaded with passengers along one track, and a stout, gray horse drawing an equal load along the other. The horse won; but the company had faith in the iron steed, and the next year put an improved locomotive into permanent service. It could draw a load of fifteen tons on the level at fifteen miles an hour if the track were dry, but on rainy days the wheels slipped and trains were pulled by horses instead. Indeed, on all the early railways relays of horses were provided to move the traffic when the engines stalled. Railroads were instantly successful in spite of loud opposition from owners of turnpikes and canals, and from draymen, innkeepers and farmers. Even clergymen preached that it was sinful to travel at fifteen miles an hour since God had created no animal which could maintain such a speed. Ten years later nearly three thousand miles of steam roads were operating in the eastern states, and during the decade which followed this mileage more than tripled. And nothing (except perhaps war) created such a demand for shovels as railroad building. When Oliver Ames first came to Easton a traveller, journeying at top speed and with relays of horses, considered himself fortunate to average forty miles a day. Before he died forty miles an hour had been attained on several American railways.

In 1835 a railroad was opened between Boston and Providence; and by teaming shovels the short distance between Canton and Easton they could be shipped thence by rail instead of carting them by six-horse teams all the way to steamboats that plied out of Boston, Providence or Newport. In 1855 Oliver and his sons bettered even this arrangement by building their own private railway from Easton to Stoughton where it connected with the through line.

About 1830 anthracite coal began to be mined commercially in the Lehigh Valley, Pennsylvania; and shortly afterwards iron and other metals were discovered in the farther western states. This was before the days of steam or hydraulic power, and shovels were used in quantity by the miners.

Parenthetically, when anthracite coal was first introduced into the shovel works in place of charcoal, or the bituminous coal brought from England, the workmen refused to handle it. It was "pizen stuff," they said, and its fumes were deadly; and the sons of the family had to work over the anthracite fires themselves before the men could be convinced that they were harmless.

While these developments were going on near the eastern seaboard a great migration was pouring settlers into the unpopulated territory of the West. It began as a small stream of pioneers lured by adventure and a love of conquering the wilderness; but when the government began to offer unlimited grants of fertile land at the bargain price of two dollars an acre it swelled into a great, organized trek. The vanguard travelled overland all the way by 'prairie schoon-

ers'; those who followed later went by canal to the farther shores of the Great Lakes, were thence distributed by steamboats up and down the Mississippi Valley and spread into Minnesota, Iowa, Missouri, Kansas and Texas. Between 1830 and 1850 this westward movement drained at least four million people out of the East, and climaxed with the rush of the 'Forty-Niners' into California after the discovery of gold. And all these emigrants needed shovels to break the virgin soil of the prairies, clear home sites and dig for gold.

The constantly increasing demand for shovels for roads, canals, railways, mines and emigration brought about a corresponding growth in Oliver's plant. Cautiously at first, with pauses and hesitations in times of business depression, then more confidently and rapidly, we find him enlarging his small wooden shops, replacing them by others of stone, making new dams to increase his water-power and starting additional plants in Braintree and Canton. Before he died two massive stone factories (the 'Long Shop' and the 'Hammer Shop') had been built in which improved machinery was driven by steam instead of water. He saw his original handful of employees grow into a permanent force of nearly four hundred, and his first small output of shovels increase over ten-fold. The once rejected Ames tools were being exported to far-off Australia and other foreign parts, and selling everywhere for a dollar more a dozen wholesale than any rival brand. Indeed they rated of such standard value that in California they were priced in gold dust instead of in the fluctuating paper currency of the time.

His Sons — Oakes, Horatio, Oliver junior, William and John

Fortunately Oliver was not obliged to manage this rapid expansion of his business singlehanded. During the last thirty-five years of his life (for he lived to be very old) he had the able help of the two sons, Oakes and Oliver junior, who remained with him in Easton.

He educated all his five boys in the village schools, though Oakes, the eldest, had finally to be put under a strict tutor to make sure he conned his book instead of going fishing. Each lad was then set at work in the factories, and, shoulder to shoulder with the employees at fires, hammers and benches, was made to master every process of shovel-making.

John, the youngest, however, proved not strong enough for manual labor, and when he was twenty-two his father had him appointed the village postmaster. He later went to New York to represent the company there, but died, unmarried, at twenty-seven.

Horatio, the second son, proved somewhat of a family problem. An expert mechanic and a clever inventor, he was anxious to try his skill at some other kind of manufacture than shovel-making, and left Easton when he was twenty-six. After doing experimental work in various places, his father bought him an interest in an iron foundry at Salisbury, Connecticut, where he undertook the casting of cannon. He made valuable improvements in the process; but was never a prudent business man, always too sanguine about the prospects of selling his guns and often overreached by his partners. His father's journal shows that he

was constantly going to Salisbury himself, or sending Oakes or Oliver junior there, with additional funds for Horatio or to straighten out his affairs; and to the end of Horatio's life his brothers were constantly helping him out of money troubles.

Personally, Horatio seems to have been a somewhat eccentric individual. He was an enormous man, so large that when he walked beside his father he made the latter appear of almost ordinary stature; but with a piping voice which seemed especially incongruous with his great frame. He had a strong sense of humor and loved practical jokes. At one time after the Civil War, convinced that the Government was unfairly discriminating against his cannon, he published a letter accusing Admiral Dahlgren, then chief of the Ordnance Bureau, of favoring inferior guns because they were made under a Dahlgren patent. The fiery Admiral promptly challenged Horatio to a duel. Horatio accepted, which gave him the choice of weapons. He named a pair of cannons, one to be of Dahlgren's best, the other of his own. Disinterested parties were to load, or rather overload, both guns with equal but dangerous testing charges; then, while Dahlgren sat astride his own cannon and Horatio was likewise mounted on his, both were to be fired at the drop of a handkerchief. The duel never came off.

William, the fourth son, left Easton when he was twenty, went first to New York, and then to Franklin, New Jersey, to manage a foundry in which his father had an interest. But he preferred pioneer life to mechanics, and when in 1851 a treaty with the Sioux Indians opened new lands in the Territory of Minnesota, William went west to farm,

raise prize cattle and deal in land. His father bought him several large parcels of land near St. Paul, then a village of less than two thousand inhabitants. Much of this land now lies within the city limits; and William's town house, for many years a center of hospitality in the growing city, stood on the site of the present State Capitol.

Therefore only two sons, Oakes, the eldest, and Oliver junior (do not confuse them with the Oakes Angier and Oliver 3d of the next generation), remained in Easton with their father; but most efficient helpers and successors they proved to be; and Oakes became acting superintendent of the factories when in his middle twenties.

Oliver junior was temporarily disabled for physical work when he was twenty-one by a dangerous fall, and for a time thought of becoming a lawyer. In preparation for this he studied for a year and a half at Andover Academy, and then read law with William Baylies in West Bridgewater. But he regained his health; and, disliking the confinement of an office, returned to Easton and joined his brother in managing the works.

It is interesting to trace Oliver senior's increasing reliance on these sons from the brief entries in his journal. A dam broke. "I was away," he writes, "but Oliver managed very well, considering." "Sent Oakes alone to New York to settle our affairs there." "Oliver went to Salisbury to meet Horatio's creditors. He handled them as well as anybody could expect" — and so forth. Presently, instead of saying, "I built" such and such a shop, or "I made" so many shovels, he begins to write 'we.' In 1844, as a conclusive proof of his confidence, he took both into partnership. He

was now sixty-five, Oakes was forty and Oliver junior thirty-seven. He gave each a third interest, retaining the same share himself; but characteristically stipulated that he was not to be over-ruled in the management. Thereafter the 'O. Ames' shovels were branded 'Oliver Ames & Sons.'

Oliver as a Town Builder

The expansion of their business forced Oliver and his sons to become town-makers as well as manufacturers, though I do not think this was against the old gentleman's inclination, for he loved both to build and to farm. His first employees had been born in Easton, owned their homes and lived off their own fields and gardens. But the native population of the village grew slowly; and as the demand for workmen increased it became necessary to import laborers, though Oliver senior lamented the day when he could not call every man in the factories by name. A series of bad harvests, beginning in 1843, brought about great distress in Ireland and forced so many to seek better conditions elsewhere that in ten years she lost over a million of her population, most of them coming to America as a Promised Land where they were sure to find immediate employment. At this time the standard wage in New England for ordinary labor was slightly less than a dollar a day, but living was so cheap that a man could support a family of five on three or four days' pay a week. The first immigrants were either single men or those who left their families behind to be brought over as soon as they had earned enough to pay steerage passages in the crowded ships. They were unskilled in the mechanical trades, and the

trained workers in the shops were now promoted to foreman whose duty it became to teach the 'green-horns,' as they were called, the various operations of shovel-making.

But the arrival of this new class of employees presented a new problem. They had to be housed and enabled to buy food, and other necessities; and Oliver was obliged to become house-builder, agriculturist and store-keeper on an extensive scale. Whenever old wooden shops were replaced by larger ones, or by others of stone, they were moved to a new site and remodeled, either into boarding houses for the single men or into individual tenements for those with families. In 1852 the long row of wooden factories near Shovel Shop Pond, where most of the manufacturing had heretofore been carried on, was burned; but the demand for shovels was then so brisk that carpenters were gathered from all the surrounding towns, and in less than three weeks temporary shops were built and operating. These were so planned, however, that they might later be divided into houses; and many of the tenements that line the streets of Easton are sections of them. Oliver notes in his day-book that one of these temporary factories was so large that it took "twenty-four yoke of oxen" (forty-eight animals) to drag it to another site.

The new-comers also needed a general store as there was then no place in the village where they could buy provisions, household supplies or clothing; and in 1847 the company built one of substantial size. It replaced a very small one Oliver had built on the same site thirty-three years before in connection with his cotton factory. But this first store had become principally a groggery, and many a farmer who

tethered his horse outside was glad enough to find a sober animal waiting to pilot him home at nightfall. Liquor was never sold in the new store, but it stocked almost everything else; and the workmen's wives bought there on credit against their husbands' wages. Corporation stores have often been condemned as over-profitable to the owners, but the Ames store invariably showed a yearly loss. It stood nearly opposite the present Public Library; and, until the town had grown sufficiently to have more specialized shops, was for nearly eighty years the village trading place. I thought it a fascinating resort in my boyhood. On one side was a grocery with open barrels of sugar, crackers, dried apples, prunes and other edibles; on the other a drygoods department displayed cloth, ribbons, clothing, boots and hats; and between the two, in front of shelves of hardware, stood a small, locked candy counter. In the odorous basement were great vats of molasses, oil, turpentine and kerosene; and in the attic above furniture, tools, baby carriages, and, I especially remember, sleds.

Oliver also had to farm extensively. The high-sided wagons that clattered daily from Easton to Bridgewater, Braintree and Canton carrying half-finished shovels, or took the completed tools to Boston or to the Providence and Fall River steamboats, were drawn by teams of four, or even six, horses; and several yokes of oxen were kept for heavier work, so that there were numerous animals to feed, and many fields had to be cleared for raising hay and grain and growing potatoes and other staple vegetables in quantity for sale. Oliver took special pride in his oxen, carefully set down the weight and measurements of each

new pair; and almost every year won prizes with them at the County cattle-show.

Besides the journal, in which he entered all developments at the factories, he kept a daily record of the weather, his crops, the slaughtering of cattle and pigs (meat was sold to the workmen always at half a cent less a pound than the market price) and, particularly, the rainfall, since this affected the power at the factories. Indeed these records became such an exact habit with him that on the day his wife died he entered the weather first and noted that event afterwards. In 1849, to house animals and store hay, the company built, across the street from Oliver's house, a great barn one hundred feet long, and near it what was called the 'Chaise House' for the family's private horses and carriages, as all of them were using horses constantly for trips to the out-of-town plants and elsewhere. This barn burned in 1887. It was rebuilt ten years later; but when at last it stood vacant because the railroad and motors had done away with the need of animals, it was remodelled into the present offices of the Ames-Baldwin-Wyoming Company.

Oliver took a fatherly interest in the welfare of his employees and in the town he had watched grow up about him, and where he was naturally the dominant citizen. As I have said, he abolished the village rum shop; and when in the 1830's a temperance movement, set afoot by the sermons of Lyman Beecher, swept New England, he joined in it for the benefit of his workmen. He thereafter drank no more liquor himself, and brought his sons up to be total abstainers. It was then the custom to furnish haymakers,

harvesters and other out-door workers with free rations of 'black-strap,' a drink in which rum was the principal ingredient. Oliver substituted a temperance concoction of molasses, vinegar, ginger and water called 'swidgel' (it was still carried into the hayfields when I was a boy) but added to the men's wages what the rum cost him.

He Turns Unitarian

When he came to Easton it was expected that a man of his standing would immediately join one of the two existing congregations, Orthodox or Methodist, and become a professing member. But Oliver was an independent thinker; and, though he usually attended service at one or the other church, said he would prefer to be a 'heathen Mohammedan' than subscribe to either of their rigid creeds. Indeed, the Methodist congregation once held a mock trial and denounced him as "the worst young man in town." When, however, the more liberal Unitarian doctrine, spread by the sermons of William Ellery Channing, began to be known in Massachusetts, this seemed to Oliver a faith in which he might concur. There was a disused church building in North Easton which stood where the 'Rockery' now is, and he had it repaired and reopened, and invited ministers of several different denominations to preach there in succession. Most of them Oliver paid personally at a regular fee of fifteen dollars a Sunday; and for many years the regular parson always drew his salary at the Ames office.

The new church was so small that one minister said he might almost lean out of the pulpit and shake hands with the choir in the gallery opposite; and the parishioners of

the other churches, who resented this third meeting-house, insinuated that the congregation was also so small that the church bell had been hung to swing north and south to summon the Poole family from South Easton and the Ames family from the north. Oliver was accused of being so lazy (he was now in his middle sixties) that rather than climb into his chaise and drive to church he had started another within walking distance of his house; but I imagine such talk did not disturb him in the least.

After various preachers had been heard in the new meeting-house the parishioners were called together to vote for a permanent minister, but Oliver settled the question promptly and without a vote. "Take the Unitarian," he said, "and I will pay half his salary." And so the family turned Unitarian.

Naturally enough he took a proprietary attitude toward this church, and made no bones about criticizing any sermon that did not please him. He once said to a visiting clergyman, "Young man, you must feel pretty proud to have the Almighty let you know so much about what He's up to"; and one Sunday when the choir was floundering somewhat uncertainly through a new hymn Oliver rose in his pew and advised them "better sing 'Amsterdam' or some tune you all know."

Some Stories of Him

Personally Oliver senior was far from being the benign type of village patriarch. He was autocratic in his opinions, and much more inclined to command than to argue. Oakes and Oliver junior still stood somewhat in awe of him even

when they were grown men, though *their* sons could hardly imagine either being awed by anybody. But respect for parental authority seems to have waned since those days. Like George Washington he had a flaming temper, and, like Washington, ordinarily managed to control it; but it sometimes flared out in spite of him. One aged shovel-maker used to tell of an occasion when he was tending a trip-hammer as a young employee. Suddenly he felt a mighty thwack across his shoulders and whirled about to see Oliver standing over him, with flashing eyes and upraised cane, expressing an opinion of careless workmanship in terms that might have stirred even his placid oxen — and it was generally conceded that when aroused the old gentleman could swear like a highly expert pirate. If from his office windows he spied any of the village boys crossing his mowing fields he might dart out of doors, without his wig, his long coat streaming behind, brandishing his stick and bellowing thunder; and the boys could not have run faster if Old Nick himself had appeared with horns and hoofs. When he was over seventy a neighbor saw him hurdle the waist-high picket fence around his garden, chase and overtake the well-grown lads who were stealing pears in his orchard and shake them till their teeth chattered.

In Oliver's time wrestling was as popular a sport as baseball or football is today. It was not considered beneath the dignity of anyone to engage in it, and local champions were as highly esteemed as crack amateur tennis or golf players are now. Oliver senior was the acknowledged champion of the neighborhood, and, though often challenged by contestants who sometimes came long distances

to meet him, was never defeated, though he continued to wrestle after most men would have given over on account of age. He was not only immensely strong — he once knocked down a horse that bit him with a single blow, and lifted a wrestling opponent much heavier than himself clear of the ground and tossed him across the ring in protest against some unfair trick — but he was also agile and expert in all the technical grips, holds and falls of the sport. He taught his sons to wrestle scientifically; and Horatio, the mighty of bulk, and Oliver junior became so proficient that they succeeded him as town champions. It is a family story that the old gentleman once said to one of them (according to some this was Horatio, to others Oliver junior) "Son, neither you nor I have ever been beaten. Old as I am I may still be the better man. Let's have it out." So, forbidding anyone to follow them, father and son went to a secluded clearing in the woods and had a private bout. But neither would ever tell which was the victor.

Although he himself had invented many improved processes for shovel-making, Oliver in his later years, like most aging men, grew distrustful of innovations made by the younger generation; and sometimes his sons had to hide new machines from him till they could demonstrate that the quality of the work would not suffer. He came near smashing with a sledge-hammer a new device for shaping handles he discovered by accident; and was once found destroying a whole batch of shovels, using his great strength to bend them out of shape against the factory floor, till he was told that they were trench tools purposely made light for the use of soldiers.

He was fearful (or perhaps only artfully pretended to be so) that the "boys," as he continued to call his sons even after they were middle-aged, might not be keeping the Ames shovels up to the standard he had set; and they naturally grew somewhat restive under this constant criticism. The United States Armory once sold an odd lot of old, unused tools, and one of the "boys" chanced to find among them some shovels made by his father during the War of 1812. He bought them, had them cleaned and polished, mixed them with others just turned out and invited Oliver into the office to criticize the batch. The old man looked them over carefully, weighed and handled each and threw out most of his own make as inferior. In triumph his sons showed him his mark on those he had rejected; but he indignantly refused to admit that he had ever made them. Someone must have forged his brand, he said; but he was rather more lenient with the new work thereafter.

The old gentleman's obstinacy once cost the family a pretty penny. He had lent money to a neighbor who moved West and bought a farm in California, but did not prosper, and the abandoned farm ultimately came into Oliver's hands. He paid taxes on it for several years and then resolved to let it be sold for default. This was before the gold rush, but his sons were more hopeful about the future development on the Coast, and urged him to hold it a while longer; but Oliver was adamant. No farm, he said, would ever be worth anything which could be reached only by an overland journey of months or a voyage around the Horn. He would throw no more good money after bad. And so the family

lost possession. Many years later his son Oakes happened to be in California and was curious to find where the farm had been situated. He discovered it had occupied a sizeable tract near the present center of San Francisco — land worth millions today.

In 1828, 1833 and again in 1834 Oliver was elected to the Massachusetts House of Representatives, and when he was sixty-six served one term as state senator; but he took on these duties reluctantly, and once wrote in his journal, "Went to Boston yesterday for the first time in $2\frac{1}{2}$ years. Glad of it." The only public office he cared for was surveyor of the Easton highways, and this post he held for life. He constantly urged the town to improve and extend its roads, and personally supervised their building. When Centre Street was lengthened all the way from North Easton to the Centre instead of ending beyond the village in a cart-path Oliver broke the new ground himself, holding the plough behind a double yoke of his prize oxen to turn the long furrows.

He was fond of building, and when he built for permanence nothing but the heaviest timbers and most massive stones satisfied him. He spent a day at the granite quarries in Quincy to choose the great foundation stones for rebuilding the Long Pond dam, measured and recorded their unusual length and thickness, noted that they were "all well hammered" and then buried them out of sight at the sill of the dam.

Parenthetically, all the stone for the Easton shops built before 1852 was hauled by ox-teams from Quincy or Weymouth. The Long Shop and those built later were of the

local iron-stained granite from a now exhausted quarry behind the present High School building.

Oliver took great satisfaction in the many fields he had cleared and walled with stone; and when his grandson Oliver 3d showed him with some pride the specimen shade trees he had set out around his new house the old gentleman's only comment was, — "I spend my life clearing the woods away to make clean fields, and here you boys go and tree 'em up again." One day he pulled up his sorrel horse to watch my father planting some seedling pines to hide a rocky slope. Then calling out, "better paint it green, Oakes Angier, — better paint it green!" he drove along.

During his busy years he naturally had time to read little except the newspapers; but in later life he liked to hear his daughter Sarah read aloud in the evenings. Histories, American for choice, and biographies interested him; but he would never listen to novels — "love trash" he called them.

He was quite aware of his imposing appearance, and on formal occasions wore a velvet waistcoat and was particular about the proper folding of his white linen or black satin stock. Usually, however, he preferred to knot a more comfortable handkerchief around his throat, and liked a bright red one.

FAMILY LIFE IN EASTON IN 1861

ALL THE AMESES OF EASTON SPRING FROM OLIVER senior, and before we take leave of him let us glance for a moment at the family as it clustered about him during his old age — say in 1861, to take the memorable date when the Civil War broke out. He was now nearly eighty-three and had but two more years of life and one of health before him. By this time he had handed over the management of the factories and the family finances almost entirely to his sons Oakes and Oliver junior, now themselves past middle-age, and who in turn had begun to rely on their own grown-up sons. But in 1861 the old gentleman was still active, driving his favorite sorrel horse about in his old-fashioned chaise to superintend the out-door work of farming and building.

When his eldest son married, Oliver partitioned his house into two parts, kept one half for himself, and settled the young couple in the other. So in 1861 he was living in the southern part of this dwelling with his widowed daughter, Sarah Ames Witherell, and her daughter Emily, who kept house for him, for his wife had been dead for fourteen years. In the northern part lived his son Oakes with his wife and their daughter Susan. His son Oliver junior with his wife and their daughter Helen lived in the adjacent house his father built for him. Three of his grandsons had married and built houses for themselves in the village — Oakes Angier Ames, Frederick Lothrop Ames and Oliver

Ames 3d, though the latter's house was not finished until the following year. Another grandson, Frank Morton Ames, was settled with his family in Canton, Mass., where he had gone at twenty-six to take charge of the Kingsley Iron & Machine Co., a profitable foundry owned by the family. His daughter, Harriet Ames Mitchell, with her husband and children lived in East Bridgewater, Mass., where Oliver had built a house for her. His other sons, Horatio Ames and William Leonard Ames, were, as I have said, established respectively in Salisbury, Conn., and St. Paul, Minn. In 1861, Oliver had, therefore, a daughter, two sons, three married grandsons, three granddaughters and two great grandchildren in Easton; and if all his living descendants chanced to foregather in town at the same time (and they were constantly returning to visit him) he might count four sons, two daughters, seventeen grandchildren and seven great grandchildren, besides the seven wives who had joined the family by marriage. Fifteen more great grandchildren were born later.

The following table — easily skipped by anyone not interested — will show the distribution of the various families at this time:

Members Living in Easton in 1861	*Members Living Elsewhere in 1861*
OLIVER AMES SENIOR, aged 82, living in the southern part of the house he had built forty-eight years before. His wife (Susanna Angier of West Bridgewater, Mass.) had now been dead for fourteen years. Living with him	HORATIO AMES (second son of Oliver Ames senior), aged 56, and his second wife (Charlotte G. Langdon of Portsmouth, N. H.) living in Salisbury, Conn. Of his three children by his first wife (Sarah Hewes Gilmore) Susan

and keeping his house were his daughter, Sarah Ames Witherell (widow of Nathaniel Witherell of Bridgewater) aged 47, and her daughter Sarah Emily Witherell, 22.

OAKES AMES (eldest son of Oliver senior) aged 57, and his wife (Evelina Orville Gilmore of Easton) living with their nineteen-year-old daughter, Susan Eveline Ames (who this year married Henry W. French of Pawtucket, R. I.) in the northern part of the paternal house.

OLIVER AMES JUNIOR (third son of Oliver senior) aged 54, and his wife (Sarah Lothrop of Easton) living with their daughter, Helen Angier Ames, aged 25, in his first house which his father built for him in 1833 when he married. He replaced this with a second house, now called 'Unity Close,' on the same site in 1864.

OAKES ANGIER AMES (eldest son of Oakes Ames and grandson of Oliver Ames senior) aged 32, and his wife (Catherine Hobart of East Bridgewater, Mass.) living with their daughter, Maria Hobart Ames, aged 5, in the house, now called 'Queset' which Oakes Angier built in 1854–55. [Children born in this house after 1861 were: Hobart Ames, 1865; Winthrop Ames... Angier Ames and Gustavus Ames were married, and Horatio junior was dead. He had no children by his second wife.

WILLIAM LEONARD AMES (fifth son of Oliver Ames senior), aged 49, living in St. Paul, Minn., with his second wife (Amelia Hall of Newton, N. J.) and his five children by her: William Leonard Ames, aged 15; Angier Ames, aged 14; Oliver Ames, aged 11; Amelia Hall Ames, aged 5; and Fisher Ames, aged 4. [He later had Herbert Ames, born 1862; and by his third wife (Annie Hines of St. Paul) Oakes Ames, born 1870.]

HARRIET AMES MITCHELL (second daughter of Oliver Ames senior), aged 42, and her husband, Asa Mitchell of East Bridgewater, living with their children, Frank Ames Mitchell, aged 20, John Ames Mitchell, aged 16, and Anna Mitchell, aged 14, in East Bridgewater in a house Oliver senior had built for them. John became the architect of Unity Church in North Easton, and the founder of *Life*, for many years America's most successful humorous weekly.

throp Ames, 1870; Katharine Hobart Ames, 1874.]

OLIVER AMES III, later Governor Ames (second son of Oakes Ames and grandson of Oliver senior), aged 30, and his wife (Anna Coffin Ray of Nantucket, Mass.) living with their first child, William Hadwen Ames, born this year, in a house in the village while their permanent residence was being built. They moved into the latter in 1862. [Children born in this house were: Evelina Orville Ames, 1863; Anna Lee Ames, 1864; Susan Evelyn Ames, 1867; Lilian Ames, 1870; Oakes Ames, 1874.]

FREDERICK LOTHROP AMES (only son of Oliver Ames junior and grandson of Oliver senior), aged 26, and his wife (Rebecca Caroline Blair of St. Louis, Mo.) living in the house now called 'Langwater,' which he built in 1859, the year before his marriage. [He had no children yet. Those born in this house were: Helen Angier Ames, 1862; Oliver Ames, 1864; Mary Shreve Ames, 1867; Frederick Lothrop Ames, 1876; John Stanley Ames, 1878.]

FRANK MORTON AMES (third son of Oakes Ames and grandson of Oliver Ames senior), aged 28, and his wife (Catherine Hayward Copeland of Easton) living with their children, Frank Angier Ames, aged 3, and Alice Lurana Ames, aged 2, in Canton, Mass., where Frank had gone from Easton in 1859 to manage the Kingsley Iron & Machine Co. [Children born in the Canton house after 1861 were: Oakes Ames, 1863; Anna Copeland Ames, 1870; Katie Eveline Ames, 1872 and Harriett Elizabeth Ames, 1873.]

By 1861 the shovel works had been profitable for many years, and the senior members of the family had invested heavily in other well-paying enterprises. In those days

(*Eheu! fugaces*) no stock was considered remunerative that did not earn at least ten per cent, and even high-grade bonds returned seven and eight, so interest-bearing capital increased rapidly, and at the beginning of the Civil War the family had come to be rated as among the richest in Massachusetts. But, though they denied themselves no reasonable comforts, their way of living remained traditionally simple. "Spend for comfort, never for show" was an Ames maxim. Greenhouses seem to have been the one extravagance; and as soon as he had built his dwelling and stable each grandson added a greenhouse.

The younger men were somewhat better educated than their fathers (though I question if book-learning has much effect in increasing natural mental capacity) for they completed their schooling at various academies or colleges. As for the granddaughters, I cannot see that their tuition was very different from that of our daughters today. They were sent to fashionable 'finishing' schools in Boston or Providence where they acquired a smattering of the languages, literature and philosophy, learned to draw and play the piano and were taught a variety of round and square dances by no less a personage than the famous Signor Papanti of Boston whose elderly son taught my generation to "jump and change feet."

The more pampered wives and children of the grandsons had begun to leave Easton during the hot months for a fortnight's stay by the sea — Nantucket and Martha's Vineyard were favorite resorts — though I cannot discover that the men ever so squandered more than a week-end.

Horses were as necessary as motor cars are now. All

members of the family were expert drivers and riders, and took pride in their spirited 'spans.' My grandfather Oakes's favorite animal was a headstrong and speedy mare named Old Kate whom he taught to trot her fastest on a tight rein and walk on a loose one, and he took a rather malicious pleasure in letting someone try to drive her who was not acquainted with her habits. Through the winter sleighs were in constant use, for before snow-plows the snow might lie packed on the roads for weeks at a time.

Houses were still lighted only by kerosene lamps. By the time the grandsons built there was plumbing and hot and cold running water; but in the two older houses water was carried to the upper chambers; and in both there was what was delicately called the 'bathing room,' with an immense tub of shining copper, though each bather pumped his own water and heated it in a boiler over a stove.

Furnaces, a comparative novelty, had only recently been put into the older dwellings; and my father's boyhood memory of open fires, which, as he said, "broiled you on one side while you froze on the other," was so vivid that my mother had to coax him to allow any fireplaces at all in his own new house.

Furniture, china and carpets were bought in Boston, and the whole family gathered to inspect and discuss important purchases. The first piano was tried by every girl who could play. Carpets came in lengths, and were fitted, sewed and tacked down at home; and each spring, when the great annual upheaval known as house-cleaning took place, they were taken up, beaten out-of-doors and tacked down again — the work of days.

For servants the wives took young Irish girls from the village and trained them into efficient cooks, nurses, waitresses and chambermaids. They apparently never left except to be married. After the Civil War my grandmother, who was interested in some benevolent society for helping the newly-freed negroes, persuaded the family to import a few young colored girls from the South; but after a pair of them, confused by the railroad arrangements, were lost for days in Providence, and another decamped, taking with her my great-aunt's largest carpet bag filled with household linen and dresses and twenty-five dollars in cash, that experiment was abandoned.

The costumes of the time will be familiar from pictures of the Civil War. On every occasion that warranted the gentlemen wore tall, straight-sided 'stove-pipe' hats and long-skirted broadcloth coats. Their faces were almost invariably bearded, side-whiskered or moustached. Lincoln, you will remember, was persuaded to grow a beard when he ran for president because clean-shaven faces were considered effeminate.

An immense amount of sewing went on in every family. The household linen was bought in bolts and made up at home. All underclothing, including the men's underflannels and fine and ordinary shirts, were of home manufacture. For such modish events as weddings and balls, dresses and bonnets were bought of professional dressmakers in Boston; but ordinarily the materials and trimmings, after much consultation about their style and quality, were made up in the house with the help of the town seamstress and pictures from the fashion magazines. Every

season there was a great remaking of old garments to bring them up to date. The sewing machine was a recent invention, and a family delegation went to Boston to test it. They approved and bought one, apparently as a joint possession for it travelled from house to house in a regular circuit.

All the Ames wives seem to have been unusually skillful cooks, which was fortunate for their husbands were fond of good living. On every special occasion they personally prepared, or at least supervised, the important dishes, and each compiled her own voluminous manuscript cook book. Favorite receipts were exchanged, and my mother's book contains many credited to the older women, such as 'Aunt Harriet's Chicken Pie,' or 'Aunt Sarah's Fish Chowder.' An even more imposing heading is 'The Ames Layer Cake.' Every spring and autumn great kettles simmered on the stoves, and a year's supply of jellies, pickles, preserves and vegetables was 'put up' in neatly labelled jars and jelly glasses, and large stone crocks were filled with sausage and mince meat.

In those days, before hospitals and district nursing, the older women had become expert in caring for the sick, and were summoned whenever there was a serious illness either in the family or in the village. They also helped with every family childbirth; and my grandmother writes that in one emergency the doctor, though sent for in hot haste, happened to be in a remote part of the town and arrived only after she had managed the birth single-handed.

With all these tasks it may be imagined that women had little time to squander; and my grandmother once laments to her diary, "I was silly enough to waste almost half the

morning over the new Dickens' novel, but I could hardly bear to lay it down."

The Ames men kept the same hours as their employees, and the family meal-times were, therefore, as punctual as the clock. Every week-day morning at ten minutes before five the shop bell warned the town to yawn itself awake; and at nine in the evening it rang a curfew (as it still does) to advise bedtime. The factories started at seven, by lamp-light in winter, and stopped at six, with an hour out at noon for dinner — a ten-hour day. The 'out-door men' who did the farming and building still worked from sunrise to sunset; and once when they struck for what old Oliver calls "this new ten-hour system" he paid off the whole force and let them go. I wonder what he would have thought of a thirty-five-hour week. Accordingly, except on Sundays, the family breakfasts were promptly at six — and no sketchy affairs of orange juice and a bit of toast either, but substantial meals of mill-ground cereals, eggs and often meat. Dinner was at twelve. Supper, always called Tea, at seven, was the sociable occasion. It usually consisted of cold meats, hot biscuits, preserves and cakes — an easy menu to expand for unexpected guests. Every week at least, and usually oftener, one household would invite the others and their visitors to tea; and the whole Ames family might assemble, even infant children being brought along and tucked into bed upstairs. Fifteen or twenty was not at all an unusual gathering.

I can imagine old Oliver, or Father Ames as the young wives called him, sitting tall and erect in his great armchair, his work-worn hands folded over his ivory-topped cane,

surrounded by his sons, his grandsons and their wives and his granddaughters, listening to the men's talk of the shops, investments and the War, while the women discussed domestic problems over their sewing or embroidery. Perhaps he might doze off at times, and then wake again to add some word of advice from his long experience, or, very likely, to comment on the slack ways of the younger generation compared with those of his own youth.

Sometimes the company sat down to cribbage or euchre, and there were regular whist parties. Oliver's partner was usually the town's young physician, Dr. Cogswell, whose style of play seemed to suit the old gentleman's temper best — and he took it hard to lose at any game.

Usually, however, Oakes, Oliver junior and their sons went to the office in the evening to catch up with their correspondence (all letters were written and copied by hand), discuss business together and go over acccounts with the head bookkeeper. As a special concession the younger men who smoked might do so now in a separate room, but no smoking was ever allowed in the parents' houses or except at night in the office.

Itinerant lecturers occasionally visited the town, some of them men of literary reputation, elocutionists read and travellers showed lantern slides. There were still village 'sings,' as they were called, and sometimes dances. Men and women joined in 'reading circles,' which were usually concerned with Shakespeare or other inspiring authors which met in the various family houses, as did the fortnightly ladies' sewing circles.

Now and again the younger members of the family went

to Boston for balls and receptions, and fairly often visited the theatre. Among others they saw Edwin Booth and Joseph Jefferson play as visiting stars with the Boston Museum Stock Company, and heard Emerson lecture and, later, Dickens read in the old Tremont Temple.

The new game of croquet was a favorite with the younger set, and the ladies were expert at archery. There was much skating and coasting in winter, and sometimes when the ice was particularly good empty tar barrels would be set on fire about the pond and skating parties held at night.

Regular attendance at church was expected of every member of the family old enough to sit upright in a pew; and my grandmother notes with suspicion in her diary that the headaches of her nineteen-year-old daughter, Susan, seemed to occur rather oftener on Sundays than on other days, especially when there was to be a second sermon in the afternoon. The family usually walked to Oliver's Unitarian meeting-house where his granddaughters, Helen, Emily and Susan, took turns in playing the reed organ, though Helen was acknowledged to be the best performer. Sometimes, however, they drove to the Methodist Church at the 'Dark Corner' or to the Orthodox Church at the Center to hear some special preacher. There they tethered their horses in a long, open shed and stayed through both morning and afternoon services, eating the luncheons they had brought and gossiping with the townsfolk during the intermission. The Orthodox Church was proud of its choir, and sometimes the entire congregation joined in 'sings' between the sermons.

Oliver Senior Dies

During the last year of his life Oliver senior's health failed rapidly. When, after some attempts, he found himself unable to continue even his daily weather record he ends it with the regretful sentence, "since July I have been too unwell to keep up this book as I used to do." But his quill-pen handwriting was still legible and firm, and his mind remained clear to the end. He died on September 11, 1863.

His son Oliver (now Oliver junior no longer) closes his father's journal with this entry: "About ten o'clock last evening Father was taken worse. He fell down beside his bed and could not get up again. They sent for Oakes and me, and we lifted him on to the bed. He was in great pain and seemed out of his head for a little while, but then came to himself. Soon, however, he became unconscious and died about two o'clock this morning. He was eighty-four years and eleven months old. We stopped the works for three days."

By will Oliver provided liberally for his daughters, Sarah Witherell and Harriet Mitchell, left his son William Leonard the property he had bought for him in Minneapolis, and to Horatio a small sum in remembrance, for he had already set him up in business. To Oakes and Oliver he bequeathed his share in the shovel works and the residue of his estate, and named them his executors.

OAKES AMES AND OLIVER AMES BUILD THE UNION PACIFIC RAILROAD

WHEN OLIVER AMES SENIOR DIED HIS TWO SONS who remained in Easton were already well past middle age — Oakes nearly sixty and Oliver almost fifty-six. They had now been equal partners with their father in the shovel works, and its active managers, for about twenty years, the years of America's most rapid commercial expansion, and their factories had kept pace. Both were now wealthy as fortunes went in those days, had invested heavily in railroads and in other ventures and were considered prudent and far-sighted financiers, influential not only in State Street but in Wall Street as well. They still supervised the shovel works, but entrusted its detailed management to their own sons, Oakes Angier, Oliver 2d and Frederick Lothrop, who were now grown and married. Varied outside interests now required most of their attention. Much of their time was spent in their Boston offices, and they were constantly being called to New York or elsewhere on matters of business.

Oliver Ames had served two terms as Massachusetts State Senator, but, like his father, he disliked political life and never took public office again. In 1860, however, his brother Oakes began a political career which ended only a few months before his death. At the outbreak of the War he was chosen a member of Governor Andrew's famous

Massachusetts War Council; and in 1862 was elected to the 38th Congress, and continued to sit in the House of Representatives in Washington for ten successive years.

Shortly after the close of the Civil War the brothers joined in financing and directing what was, perhaps, the most adventurous and important single enterprise yet undertaken in America — the building of her first transcontinental railroad, the Union Pacific.

The history of this Railway falls into two separate, though interlocking, narratives; first, that of the construction of its 1086 miles of track across the plains through deserts and over the Rocky Mountains; second, the financing of such a formidable pioneer undertaking. Naturally I cannot here tell either of these highly eventful stories except in barest outline; and if I still devote disproportionate space to them it is because I find the younger members of even a family so involved know little of them, and because most of the many books on the subjects are now out of print.

First Projects for the Railroad

Some years before the Mexican War, when all the United States between the Mississippi and the Rockies was practically a wilderness and the Pacific coast still Mexican territory, an anonymous writer in an Ann Arbor newspaper suggested a national railroad which should run from New York into Oregon — then, of course, a quite chimerical project, for apart from the regions to be crossed no locomotive powerful enough to climb the mountain grades had yet been built. But the idea would not down. From time to time similar schemes were advanced, some of

which reached the waste-baskets, if not the floor, of Congress. At that time the main argument in favor of such a railway was not to develop the intervening country, still considered an uninhabitable waste, but to fulfill Columbus's dream of a westward route by which the products of the Orient might reach the Atlantic by transcontinental carriage from the Pacific instead of by voyage around the Horn or carriage across the Isthmus of Panama. But it was not until after the Gold Rush of Forty-Nine had peopled California, rich silver mines had been discovered in Nevada, the Mormons had settled the Salt Lake region of Utah and a steady and increasing stream of land seekers was trekking into the West that such a railway seemed worth serious consideration, and debates on the subject began to be heard in Congress. These naturally centered on the route to be followed. Northern representatives argued for a line starting at Chicago; others for a more central road from St. Louis to cross the mountains through some yet undiscovered pass; and Southerners championed New Orleans as the eastern terminal. In 1853, by direction of Congress, Jefferson Davis, then Secretary of War under President Pierce, dispatched five separate surveying parties to report on "the most practical and economical route for a railroad from the Mississippi River to the Pacific Ocean." The routes to be explored were known by their popular names as the Northern Trail, the Mormon Trail (which the Union Pacific later most nearly followed) the Buffalo Trail (so-called not from the city of Buffalo but from a trail supposed to be used by the herds of buffaloes) the Thirty-Fifth Parallel Trail and the Southern Trail. The resulting reports fill eleven huge

volumes. Because of its shorter mileage, lower cost and the climate and resources of the regions through which it ran the Southern Trail seemed distinctly the most advantageous, and became the unanimous choice of the dominant Southern faction in Congress. Indeed, if it had not been for the Civil War the first transcontinental railway might have followed the general line of the present Southern Pacific, although the manufacturing North would bitterly have opposed such a distant route. By 1856 the project had become a national matter, and both the Fremont Republicans and the Buchanan Democrats wrote planks into their platforms in favor if it, though neither dared risk the antagonism of specifying any definite starting point. In 1860, with Lincoln a candidate for President, anti-slavery was the paramount issue; and, in the hope of winning California which threatened to establish a separate republic on the Coast, both parties reiterated their advocacy of a subsidized railroad.

The Central Pacific Is Organized

The next year a little group of private citizens in California brought the matter to a head. A New England civil engineer, Theodore D. Judah, who had gone to the Coast to build a short railway through the Sacramento Valley, became an enthusiast on the subject of a line over the Coast Range; and in 1861 was about to call a public meeting to lay his idea before the citizens of Sacramento when a more sagacious townsman, Collis P. Huntington, then a prosperous hardware merchant, warned him that while such a gathering might serve to promote a Fourth of July cele-

bration, or the like, any scheme which involved the conquest of the Sierra Nevadas should be differently approached. Huntington, who ultimately shouldered the financing of the Central Pacific Railway as the Ames brothers financed the Union Pacific, foresaw what strong local opposition would spring from any premature discussion of the project. San Francisco would be jealous of Sacramento as the starting point; the stage companies that plied to the Nevada silver mines and thence to Salt Lake City, and the Pacific Mail Steamship Company which monopolized the traffic to the Isthmus of Panama, would hotly oppose the competition of a railway. On the other hand, he foresaw future profits from a steam road which should supersede the ox and mule teams that toiled over the mountain passes carrying freight at fifteen cents a ton for every mile.

So Huntington invited Judah to his store where they might discuss the matter privately with a few associates. The result was the incorporation in June, 1861, under a State charter, of the Central Pacific Railway of California, a name borrowed from the Central Overland Stage line. Leland Stanford, California's Republican candidate for governor, was chosen president that he might influence popular sentiment in favor of the project; Huntington went east to raise money, and engineer Judah was dispatched to Washington, via Panama, to enlist the support of Congress.

Judah arrived at an opportune time. The Civil War had broken out nine months before, and as all Southern representatives had quit Washington there was no faction to urge a southern route, and the Northerners of the 'Little

Congress' were welded together with the common aim of winning the war. They were fearful lest California, and perhaps the whole Oregon territory, might swing toward the Confederacy, and that the Atlantic route to the Isthmus of Panama might be cut, thus isolating the far West. A transcontinental railway over which the government might, in case of need, speedily forward troops and supplies seemed a national necessity.

The Act of 1862

Under the promptings of Judah a bill was introduced entitled "An Act to aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific coast, and to secure to the government the use of the same for postal, military and other purposes." Known as the 'Act of 1862' this was debated and amended until the last days of June when it passed both houses and was signed by President Lincoln. It provided that the eastern part of the new railroad, called by the patriotic title of 'The Union Pacific,' was to begin near the one-hundredth meridian in Nebraska at a point to be fixed by the President after actual surveys had been made, and thence cross the Territories of Nebraska, Wyoming, Utah and Nevada (thus avoiding the troublesome question of State rights) by the "most direct and practicable route" to the California border, and there connect with the Central Pacific. As a subsidy the government granted both lines the vacant lands for ten miles on either side of their tracks for five alternate sections in every mile, mineral-bearing lands excepted. When each forty miles of roadbed had been built six per cent govern-

ment bonds should be issued to the companies in amounts varying from $16,000 to $48,000 per mile according to the difficulty of construction. These bonds were to become a first mortgage on the roads and to be repaid by them at the end of thirty years. Within two years after agreeing to the provisions of the act, the Central Pacific Company was required to lay fifty miles of track and fifty miles more each following year, and the Union Pacific one hundred miles within two years and one hundred miles each year thereafter. The entire continuous line from the Missouri River in Nebraska to the Sacramento in California must be opened for through traffic within fourteen years.

The Central Pacific promptly filed its acceptance of the Act; and in January, 1863, its president, Stanford, now Governor of California, shoveled a spadeful of dirt from a tip-cart into a mud hole near the Sacramento levee to mark the beginning of the new road. There were cheers and speeches, and the Central Pacific was on its way.

The Organization of the Union Pacific

The organization of the Union Pacific proved infinitely more difficult. The Central was a private company organized under a state charter, and entitled to share the government bond loan only because it would become an interstate carrier by joining the Union at the California line. But the Union was to operate under a Federal charter by the constitutional clause which gave the government power to regulate interstate commerce, establish post roads, etc., and its projected route lay not through States but wholly through Territories where the Federal authority was

supreme. Its incorporators were to be answerable not only to their stockholders but to Washington as well. Naturally the self-controlled Central Pacific, free from political interference, won much more general confidence. It was, moreover, a comparatively short line, extending only from Sacramento to the California border, and with but one range of mountains to climb. The Union was to cover more than thrice the distance, and its route lay over three ranges of mountains and through uninhabited deserts.

Indeed, so apathetic was the response to the Union Pacific project that a hasty meeting of commissioners appointed by the various States had to be called in June, 1863, to accept the Act on behalf of the yet unformed company within the time limit, and so save the charter; and six months passed before enough shareholders could be mustered to warrant actual organization. The charter provided that the Company's stock should consist of one hundred thousand shares of a par value of $1,000 each; but barely fifteen hundred shares had then been subscribed for, and only a ten per cent cash installment paid on these — and to secure even this amount required strenuous effort on the part of a few patriotic citizens.

At a stockholders' meeting held in New York in October, 1863, the Union Pacific Railroad Company was, however, incorporated at last; directors were chosen, General John A. Dix was elected president, and Thomas C. Durant vice-president. General Dix was merely a decorative figurehead and never fulfilled the duties of his office. He was a veteran of the War of 1812; as Secretary of the Treasury he had gained celebrity by his dramatic order, "if any man attempts

to haul down the American flag shoot him on the spot"; and now at sixty-five was in command of the Seventh Army Corps.

Vice-president Thomas C. Durant

Dr. Thomas C. Durant (he had been educated as a physician) was the acting, and extremely active, vice-president of the Company. He was an impressive personage of suave and persuasive address, aggressive spirit and unbridled personal ambition. Prior to the organization of the Union Pacific he had been connected with several railroad projects in the East, but rather as a promoter and stock salesman than as an actual builder. The last of these was the Mississippi & Missouri, planned to cross Iowa from Rock Island to Council Bluffs. This enterprise soon went bankrupt with only its surveys to show, but Durant now scented bigger game in the projected transcontinental line. As soon as the Union Pacific was organized he took a hand in its affairs and soon acquired a large amount of its capital stock. How he managed this was never quite clear, since he was not a man of means. Oliver Ames believed, whether rightly or not, that it was by "fictitious claims and trumped-up charges." In any case, before the Ameses became interested, Durant spent large amounts of the Company's limited funds for lobbying in Washington, for which he made no accounting. Much money also passed through his hands without tangible results when the Union built its first few miles of track west of Omaha. Nor were Durant's methods of raising funds always above criticism. For example, although he then had in his pocket Lincoln's order

that the road's eastern terminal should be at Omaha, he still tried to induce capitalists in rival towns to invest by holding out hopes that the starting point might be elsewhere.

Until the Ames brothers came in Durant had a free hand, and he resented their check on his activities. He also expected to succeed General Dix as president of the road, and when Oliver Ames was elected instead his animus became acute. The fundamental difference between him and the Ameses was that they looked forward to the operation of the completed road as a profitable investment and insisted that it be built with this in view. To quote only one of President Ames's several messages on this subject to the chief engineer, "We want," he said, "to follow the best lines that can be laid, and to see that all the construction is properly done and honestly measured." Durant, on the contrary, never believed in the railroad's future. He therefore advocated grades which would make construction cheapest, and lengthening of the line to win more federal bonds and land grants. Indeed, so slight was his faith in the road's ultimate earning capacity that no sooner was it completed than he hastened to sell his stock, though the Ames family retained and increased their shares. But, meantime, Durant's holding was so large, and he proved such a vindictive enemy when crossed, that the directors did not dare dislodge him from office until after the road had been finished, and then only because of President Grant's direct order that he be removed from the board.

But, despite the troubles he caused, Dr. Durant always made a most impressive figurehead. He fitted up his office

in New York with palms, statues and singing birds in cages to impress prospective investors, and was at his best in escorting parties of distinguished guests over the unfinished line in his elaborate special car and in entertaining them en route with almost circus-like festivities.

The first act of the new company under Durant was merely an advertising gesture. On December 2, 1863 ground was broken in the small, straggling village of Omaha. There were fireworks, patriotic speeches and telegrams of congratulation from President Lincoln, governors and mayors, and from the Mormon apostle Brigham Young in Utah. But the cost of this celebration alone exhausted the company's treasury, and fifty miles of track, estimated to cost a million dollars, had yet to be laid before any government funds would be forthcoming. Naturally the enterprise was regarded with suspicion. General William Tecumseh Sherman, though eventually one of the strongest supporters of the enterprise, wrote to his brother John in the Senate at this time, "A railroad to the Pacific? I should hate to buy a ticket on it for my grandchildren!"

The Act of 1864

Lincoln was much perturbed over the situation and discussed it with several advisors. They told him that the Act of 1862 was not liberal enough to attract private capital, and if the Union Pacific were to be built at all it must be undertaken wholly as a government enterprise. With the government's bonds a first mortgage on all the property of the road, investors would refuse to buy the company's own second mortgage bonds. While the outcome of the

Rebellion was still uncertain even the government's bonds would sell only at a discount, and the War had enormously raised the price of labor and of all materials. The land grants were of negligible value until the railroad had crossed them, and most of the route lay through deserts and mountain regions then supposed to be uninhabitable.

Lincoln answered that the burden of the War made it impossible for the government to undertake the road, but promised to use his influence so to amend the act that it might appeal to private investors. With this encouragement vice-president Durant of the Union Pacific and vice-president Huntington of the Central Pacific hastened to Washington; there was vigorous lobbying, and a revised bill, known as the Act of 1864, was drafted. It doubled the land grants and extended the time limits for completing the first sections of both roads. More important, however, was the proviso which allowed both companies to issue their own bonds in amounts equal to the government bonds, and that these should become first mortgages on the roads while the government bonds became second mortgages. Further, both issues might be released when twenty instead of forty miles of track had been completed. The Act passed both Houses by a large majority and was signed by Lincoln on July 2, 1864, superseding the Act of 1862.

The preliminary work of surveying and grading done by the Union Pacific during the previous autumn and winter had left it more than $300,000 in debt. Expecting that the new Act would now enable it to sell its securities the company contracted with one Hoxie to build and equip the first hundred miles of road west of Omaha at $50,000 a

mile. Hoxie was the only contractor willing to undertake the task, and six months proved his utter inability to carry it through. It was evident that no individual contractor had the resources to take on such an immense piece of construction; and in March, 1865, under Durant's direction, the Union Pacific followed the example of the Central Pacific and organized its own construction company. It was given the somewhat cryptic title of 'The Credit Mobilier.' I shall describe its operations (or attempt to) later. Stockholders in the railroad were to take an equal amount of stock in the construction company in the hope that with this double security capitalists might be induced to invest. But distrust of the entire project proved still too deep-rooted. In his later testimony before Congress Oakes Ames thus described the existing situation:

"The state of the country and the local conditions surrounding the enterprise seemed exceedingly unfavorable to a successful prosecution of the work. Gold was one hundred and fifty; there was no market for the first mortgage bonds, and the government bonds, payable in currency, were of uncertain value and of difficult sale. No eastern railroad connection existed whereby the vast amount of material essential to construction could find reasonable and rapid transportation to the base of the line. All materials were high, labor scarce, and only to be obtained at extravagant prices. There was universal doubt of the ultimate completion of the road, and the general conviction that if completed it would fail to prove remunerative." It was obvious that the whole undertaking was bound to collapse unless some individuals of commanding influence in the

financial world could be interested, both from patriotic motives and from faith in the ultimate future of the line.

The Ames Brothers Take Charge

President Lincoln, his mind already concerned with the development of the nation after the War, was particularly anxious that the project should not fail. Only a few months before his assassination he summoned Oakes Ames (he always called him "the broad-shouldered Ames"), who was then sitting in Congress, to consult about the matter. On January 20, 1865, my grandmother wrote in her diary, "today Mr. Lincoln sent for Oakes to come to the White House. He went immediately after dinner and talked with the President until after midnight." Ames reported that the President said to him then, and in later conferences, "Ames, you take hold of this. If the subsidies provided are not enough to build the road ask double and you shall have it. The road must be built, and you are the man to do it. Take hold of it yourself." And he added, "by building the Union Pacific, you will become the remembered man of your generation." The President said further that if the railroad could be so far completed that he might take a trip over it when he retired from the Presidency it might be the most memorable occasion in his life. Alas! his next railroad trip was to be in the funeral car that bore him to his grave in Springfield, Illinos.

Oakes Ames was a member of the House committee on railroads which endorsed the Act of 1864, but up to now he had taken no personal interest in the Union Pacific. After this solicitation by Lincoln and many others, however,

he began to give the prospects of the road careful study. The result was that in September, 1865, he and his brother Oliver, whom he had persuaded to join him, together invested a million dollars cash in the enterprise, and because of their endorsement other capitalists came forward with a million and a half additional. From this time on Oakes and Oliver Ames devoted themselves to the task of building the railroad with every financial and advisory resource they could command. It is unquestionable that without their intervention the enterprise must, at least temporarily, have been abandoned.

After marking time for three years the Union Pacific was at last galvanized into life, and its track now marched forward across plains, deserts and mountains at an ever increasing pace in rivalry with the Central Pacific. In almost exactly five years the Union Pacific surveyed, graded and opened to traffic 1086 miles of road; yet, in spite of the haste of construction and the character of the country traversed, the government inspectors appointed to survey the line after its completion reported that it "compared favorably with the majority of the first-class roads in the United States." And its surveys proved so admirable that nearly half a century later when much of the road was rebuilt and the tracks re-located it was only shortened by thirty miles.

During the last months of the race between the companies the Union Pacific laid an average of three miles of rails a day through desert and mountain country — a still unequalled record. During the World War the American army engineers in France built only one and one-third miles a day for one hundred days, and then with the use of

steam-shovels, derricks, drills and all the modern apparatus for roadbuilding. But every mile of the Union Pacific was graded and laid by hand. It was, moreover, built entirely from one end. The nearest points to Omaha for the delivery of supplies, most of which came from much farther east, were either at St. Louis, from whence they were carried by steamships up the Missouri where navigation was only possible during high water for three months in the year, or from the end of the Chicago Northwestern Railway in Iowa, from which they had to be teamed a hundred miles to the Missouri and then ferried over. Beyond Omaha all the construction materials and supplies had to be hauled over the railroad's own line to the ever receding 'end o' track,' finally, more than a thousand miles distant.

As Oakes Ames said, in reference to that part of the work for which he made himself responsible, "to undertake the construction of a railroad, at any price, for such a distance in a desert and unexplored country, its line crossing three mountain ranges at the highest elevations yet attempted on this continent, through a country swarming with hostile Indians, by whom surveyors and conductors of construction trains were repeatedly killed and scalped; upon a route destitute of water, except as supplied by water-trains hauled from one to one hundred and fifty miles to thousands of men and animals engaged in construction; the immense mass of material, iron, ties, lumber, provisions and supplies necessary to be transported from five hundred to fifteen hundred miles — this, I admit, might well, in the light of subsequent history, be regarded as the freak of a madman if it did not challenge the recognition of a higher motive."

Chief Engineer, General G. M. Dodge

If the Union Pacific was fortunate in securing the intrepid Ameses to undertake its financing, it was equally fortunate in entrusting its construction to Major-General Grenville M. Dodge as chief engineer, and the command of its grading and building crews to General "Jack" Casement and his brother, Dan Casement. Jack Casement, Irish, red-bearded, fiery and scarcely more than five feet tall but of tireless driving force, had done gallant fighting with the Ohio troops in the War. His charge ranged from the graders in advance to the tail of the work-train. His brother Dan, of equal mettle, attended to the forwarding of supplies.

As for Dodge, in addition to his natural ability and force of character, his previous training seemed ideally designed to fit him for the post. Born in Danvers, Mass., he early decided to enter the engineering branch of the army, and graduated from the military university at Norwich, Vt. He was immediately employed as assistant surveyor for various railroads in the east, and was then engaged by the Mississippi & Missouri which was plotting a line through Iowa to the banks of the Missouri. His surveys for this road, and a study of all the available maps of the unexplored country to the West, convinced him that some future transcontinental line would be likely to start at or near Council Bluffs, then a small Indian settlement directly opposite Omaha on the Missouri River and a stopping place for the Mormon caravans bound for Utah.

In the summer of 1859, Abraham Lincoln, who happened to be making political speeches in the vicinity, stopped over

night at Council Bluffs. Next day, while waiting for the steamer to take him on down river, he sought out young Dodge, of whose interest in the western extension of a railway he had heard, and they discussed the various possible routes for a line to California — a plan already stirring in the future president's mind. He was obviously impressed with Dodge's knowledge, ability and straightforward honesty, for he several times consulted him later; and when it became necessary for him as President to designate the starting point of the Union Pacific it was Dodge who convinced him that Omaha was the best site.

Dodge enlisted at the outbreak of the Civil War. Wounded at the battle of Pea Ridge he was promoted "for meritorious and distinguished service" to the rank of brigadier-general. But it was then discovered that he could build railroads as well as fight, and as the army was in sore need of expert engineers he was assigned to repair the lines destroyed by the Confederates. His work so impressed both Grant and Sherman that from 1862 to 1864 he directed the pioneer corps which built and restored railroads and bridges in advance of Sherman's march from Atlanta to the sea.

After the War, Dodge, now major-general, took command of the United States troops in Kansas, Nebraska, Colorado and Utah, and campaigned against the Indian tribes which, emboldened by the Rebellion, had gone on the war-path and were killing and robbing west-bound emigrants, and had all but destroyed the government mail routes. Dodge had previously negotiated with the directors of the Union Pacific about becoming their chief engineer, but Grant was reluctant to let him go, and the directors held

the place open until the end of his campaign. Dodge then discussed the appointment with vice-president Durant.

Their meeting was not wholly amicable. Peter A. Day, the first engineer of the Union Pacific, had resigned because of differences with Durant, and Dodge believed that Day was as high-minded and straightforward as Durant was undependable. But Durant realized that Dodge was the only engineer in the country capable of reorganizing the construction crews, fighting the Indians and building the road at the same time; and, with the aid of Sherman, persuaded Grant to release him from the army for this patriotic service. Dodge finally agreed to take the post, but first made his future policy clear. "I will become your chief engineer," he said, "only on condition that I be given absolute control in the field. You propose to build a railroad through a country that has neither law nor order. There must be no divided authority. There must be no independent heads in the west, and no masters of construction in New York." Durant agreed to these stipulations though it was not long before he broke his word.

Dodge then made a hasty trip east to meet the Ameses and took to them at once. Like Lincoln, Grant and Sherman, they also formed a high opinion of him, and the three worked together in complete harmony and confidence till the railroad was completed; and Dodge constantly referred to Oakes as "the real pluck of the work."

Dodge was only thirty-five when, on May 6, 1866, he entered the chief engineer's office in the second story of a little brick bank in Omaha and took charge of building the Union Pacific. He found no proper organization; the

engineering, the construction and the operating departments all reported separately to New York. Almost half a million dollars had melted away, and for much of it no satisfactory accounting was ever made.

Moreover, though the line had thrust a few miles of track from Omaha westward across the plains, nobody knew definitely what its future route was to be. As Dodge's biographer suggests it might well have taken for its motto the popular song, "I don't know where I'm going, but I'm on my way." For some three hundred and fifty miles it would obviously follow the great natural highway of the Platte River valley across open rolling prairies, but even the western part of Nebraska was still labelled merely 'The Great American Desert' on maps of the time. It was the general belief that the road would leave the Platte somewhere near the Colorado border and strike southwest for Denver, then becoming an important mining center. But surveys of the mountain passes west of Denver showed altitudes of over eleven thousand feet, perennial snow, and grades that would necessitate rock tunnels costing years of labor and millions of dollars. The only alternative seemed to turn sharp north again and skirt the eastern slopes of the Laramie range till the famous Oregon Trail, long travelled by emigrant wagons and stages, showed a way across the Continental Divide. But even the grades of this trail, though possible for animals, would be difficult for a locomotive. Then the line was expected to join the Mormon Trail, follow it into Salt Lake City and from there strike toward California. This route involved two long detours from a direct westerly course, first south to reach Denver,

and then north again to the Oregon Trail, which would lengthen the line by hundreds of miles; but no surveys had yet shown any other practicable way of crossing the Rockies. Indeed, the discovery of the mid-way pass through which the road was ultimately built was one of those strange accidents that sometimes change the fate of great enterprises.

The Discovery of the 'Lone Tree' Pass

While General Dodge was still campaigning against the Indians in northeastern Wyoming his interest in a through railway led him to leave his troops occasionally and explore various openings in the Black and Laramie ranges. In the autumn of 1865, with only twelve men as an escort, he rode to the summit of Cheyenne Pass and then south along the crest of the ridge. Without warning a band of Crow Indians, who had been lurking among the rocks, cut him off from his column. Holding Indians at bay with their rifles and leading their horses the little party started along the eastern slope and made for a ridge from which they could sight the troops below. The cavalry, seeing the smoke of their signal fires, started to their rescue, and the Crows retreated. But while waiting for the soldiers Dodge observed through his field-glass that the ridge where the Indians had driven him seemed to lead without a break down to the plains, and, turning to his men, exclaimed; "Boys, if we save our scalps I believe we have discovered a pass through which a railroad might be built." But without actual surveys he did not feel certain that it would prove practicable, and kept the discovery to himself.

As soon, however, as he took charge of the Union Pacific

he dispatched James Evans, his assistant engineer, to re-locate and map this 'Lone Tree' pass, so-called because he had marked it by a single tree at the foot of the grade. Evans triumphantly reported that it was possible to plot an almost unbroken ninety-foot to the mile grade from Cheyenne to the top of the pass and a still easier descent into the Laramie plains on the west. This discovery was to save the railroad millions of dollars in mileage and construction costs and solve its most vexing problem, though it was only the first of several, for the hostile Red Desert, the towering Wasatch range which divides Wyoming from Utah, and the Utah desert still lay beyond. Dodge named the new pass the 'Evans,' and its highest point 'Sherman Summit' in honor of his Civil War chief, who, after a period of skepticism, had become one of the railroad's staunchest supporters.

The Race between the Central and the Union Pacific

When Dodge began active work as chief engineer of the Union Pacific, although the first rail had been laid with a flourish nearly a year before, shortly after Lee's surrender at Appomattox ended the Civil War, only thirty-one miles of track was in working order, and some of this had still to be re-located. But now, with the Ames brothers at the financial helm, much more rapid headway was possible — and was, indeed, imperative. Spectacular progress was needed to convince a doubting public that the work had now been undertaken with determination and was likely to be carried through. There were even more urgent financial motives. Neither the bonds of the government nor those of the railroad itself could be issued until after each twenty

miles of track had been built and passed three times by federal inspectors, who took their time, and often recommended petty and unnecessary changes before they would sign a final approval. Nor were the land grants saleable till the road had reached them. Meantime, money for construction had to be borrowed at ruinous rates of interest.

Then, in July, Congress tossed a bombshell into the Union Pacific directorate. Taking advantage of the public eagerness that the through railway should be opened for traffic at the earliest possible moment, Huntington of the Central Pacific hastened to Washington, and, after some astute lobbying, induced Congress to set aside that clause in the Act of 1864 which had stopped the Central's line one hundred and fifty miles east of the California border. It was now authorized to "continue eastward until it shall meet and connect with the Union Pacific Railroad."

This was a most unwise piece of legislation, and came near landing both roads in bankruptcy, for instead of naming a definite junction to which each might build with reasonable speed and economy, it started them on a competitive race for an indefinite goal. Now every extra mile either road could cover meant greater future revenues from passengers, freight and mails, more land grants and more construction loans. The Central's new aim was to reach Salt Lake City before the Union, and so tap the rich Mormon agricultural settlements; the Union hoped not only to beat the Central to Salt Lake but to press on beyond, perhaps even reach the California border. Therefore, in the contract to build six hundred and sixty-seven miles of the most difficult part of the road which, on August 16, 1867,

Oakes Ames personally assumed, it was stipulated that "the work shall be prosecuted with all possible speed, yet be a first-class road with proper equipment, it being understood that speed of construction is the essence of this contract." So, in mid-summer, 1867, both companies began an unnecessary and ruinous contest to reach an undetermined point, while the whole nation cheered them on with as much excitement as if it had been a horse race. Dodge immediately reorganized the work of construction on a military basis. He coördinated the scattered groups of surveyors, and his road builders, Jack and Dan Casement, jumped the original force of graders and track-layers from two hundred to a thousand.

Indian Attacks

The surveyors, in small parties, usually worked from one to two hundred miles ahead of the graders, though some, sent to explore the mountain passes, might be five hundred or more from the railroad's base. Each group, made up of engineers, rod and flagmen, chain-men, ax-men and teamsters, numbered from ten to thirty. In regions where there was game a hunter went along to supply fresh meat. Every man was armed — a vital precaution, for, despite the campaigns against them, bands of the fierce Sioux and Cheyenne Indians still roved the plains, and passengers on the galloping overland stagecoaches, and isolated ranchers entrenched behind sod walls, often had to fight for their lives.* Until the railroad was two-thirds finished the troops

* In 1862 the Indians murdered Sarah Angier Ames, granddaughter of Oliver Ames senior and daughter of his son Horatio, with her husband, Dr. P. P. Humphrey, and their two young children near Fort Ridgley, Minnesota, where they were ranching. One son, John, a boy of twelve, hid and escaped.

assigned by the government proved quite insufficient to protect its builders. As one officer said, "it was difficult for one soldier to surround three Indians."

The savages fully realized what the passage of the rails across their hunting grounds would mean. Chief Red Cloud put it tersely when he forced one surveying party in Wyoming to turn back: "We do not want you here," he said. "Your iron horse will scare away our buffalo"; and the small scattered groups of surveyors were particularly exposed to attack. In May, 1867, the Sioux ambushed one expedition near Cheyenne and killed the engineer and most of his crew. In the same month another party was surrounded on the Laramie Plains just at nightfull; one man was shot and all the horses stampeded and captured. Next morning the Indians returned and killed five more men before they were beaten off. But the engineer in charge, Percy T. Browne, buried his dead, got fresh horses from the nearest ranch, and pushed on with his shrunken little band — the surveys must not stop. In the Red Desert he was overtaken by a swarm of Sioux on their way to raid the Overland Stage line. Browne's men dismounted, crouched behind some rocks, and from noon till dark the nine white men held off well over one hundred savages. Again their mounts were killed and Browne was shot through the stomach. He begged his companions to leave him and escape in the dark, but they made a litter of their rifles and carried him fifteen miles to a station on the stage line where he died at daybreak. In his account of building the road Dodge gives many other instances when Indians attacked surveyors, stole their food and horses, and men died beside their transits.

Nor were Indians the only perils the surveyors had to face. One expedition, lost in the same Red Desert, was driven by thirst to drink from an alkali-poisoned pool which so sickened their animals that they had to be shot. The men, their tongues black with thirst, were so weak that they were crawling through the brush on hands and knees when they were discovered by a rescuing party, and then came near being killed because they were mistaken for stalking Indians. In the early spring of 1868 another group, snow-bound on the Wasatch Mountains, was cut off from all communication for two weeks. They abandoned their wagons in the eight-foot drifts, their mules were buried by a cave-in, the men lost their packs in crossing a swollen mountain torrent and had to make their way on foot and without food down forty miles of icy trails to reach the plain below.

Next to the surveyors the crews of the supply and freight trains, which began to run over the track as soon as it was laid, were in greatest danger from the Indians, for they too worked in small unprotected squads. It was a favorite pastime of the Cheyennes to gallop alongside a train and pepper it with bullets while the gang aboard shot back and the engineer ran at top speed. But sometimes they did not escape. For example, in the summer of 1867 what is known as the Plum Creek massacre took place near that station (now Lexington) about half-way between Omaha and the end o' track, then west of Julesburg. It was the first time that the Cheyennes succeeded in wrecking a train, though not the last. They had once tried to stop the 'fire horse' by stretching a hide rope from pony to pony across its path,

with unfortunate results to the rope-holders. But now a large party of them gathered on the deserted plain at sundown and studied the track. They knew that the white men's 'big wagons' which ran on these rails often carried food and clothing; if they could be thrown off they might be broken open and pillaged. So, as an experiment, they laced a tie across the rails with wire cut from the telegraph line, drew off and waited to see what would happen. Something did. A hand-car, carrying a repair crew of six, had been sent from Plum Creek to investigate the break in the telegraph. It struck the tie, somersaulted, and tossed the men in all directions. They scrambled to their feet and ran for their lives. All but William Thompson, chief linesman, were overtaken and killed. A mounted Indian chased him, shot him through the arm, knocked him down with a rifle-butt and scalped him; but as the savage was riding off with his trophy it slipped from his belt. Thompson, who had shammed dead to avoid being murdered, scrambled after it and picked it up. He hoped if some doctor could stick it on it might grow again, and for some days kept it soaking in a pail of water.

Elated by the discovery that the white men's wagons were vulnerable the Cheyennes now planned a more elaborate wreck. By the light of a bonfire they pried up the ends of two rails, piled ties under them and waited again, for they knew that freight trains often ran through this section at night. Indeed, two westbound freights were already speeding toward Julesburg. The engineer of the first, seeing the Indians, threw his throttle wide and attempted to run by; but the engine leaped from the broken rails, plowed along-

side the track and the box-cars telescoped or piled on top of one another. The engineer was killed, and the fireman, pinned against the fire-box, was roasted alive. Three brakemen and the conductor were in the caboose at the end of the train. While the Indians were whooping and circling about the wreck ahead they crept out and ran back along the track to flag the second freight which was following so close behind that they could see the glimmer of its headlight. The Indians discovered them and gave chase, but they managed to reach the oncoming engine just in time to be hauled into its cab, and the train backed away full speed for Plum Creek.

Meantime linesman Thompson, with only strength enough to crawl away into the shadows beyond the fire light, watched the Indians at their saturnalia. They looted the box-cars of whiskey, sacks of flour and sugar, bolts of colored cloth and women's bonnets and dresses bound for the trading post at Julesburg. They drank the whiskey, donned the bonnets, and, unrolling lengths of calico from the cruppers of their horses, ran races to and fro across the plains, and at last set fire to all the cars till the wreck was a roaring mass of flame. This Plum Creek massacre was, perhaps, the most spectacular attack on a freight or construction train; but there were several others in which engineers and crews lost their lives.

The graders and track-layers, who worked in camps, were somewhat better protected. General Sherman, now in command of the military forces on the plains, had ridden out to the end o' track on a flat car, seated on a nail keg, in 1865, and had come to realize that the railway was a mili-

tary as well as a commercial necessity. He therefore ordered the officers of the army posts in the western division to guard the builders with all the soldiers that could be spared from the forts; and through Wyoming and part of Nebraska the road was built inside federal picket lines. But the government troops were too few and scattered to give any adequate protection. An attempt was made to eke out their numbers by enlisting some friendly Pawnee Indians, and four companies of them were enrolled and uniformed as regular army scouts. But though keen to fight their hereditary foes, the Sioux and Cheyennes, they proved incorrigible under discipline and on guard duty. "You might as well try to make a watch-dog out of a wolf," said one of their officers; and they invariably cut the seats out of their army trousers and rode bare-breeched.

Indeed until the Union Pacific neared the border of Utah "almost every mile of the road," writes General Dodge, "had to be run within the range of the musket. Graders, track-layers and station builders slept under sentries, often went to work with a tool in one hand and a rifle in the other, and sometimes half the force might stand guard while the other half worked." But, though a number of individuals were killed and hundreds of animals stampeded and stolen, most of these constructing crews managed to protect themselves. So many of them had been recently mustered out of the army that when Dodge ordered one gang he had never seen before to "deploy as skirmishers" the whole force fell in and went forward as steadily as old soldiers under fire. Indeed they were not at all averse to relieving the daily monotony with an occasional set-to, or long distance shoot-

ing match, with the Indians, and soon taught the latter to forego the pleasures of attempting murder and scalp snatching in their camps.

Graders, Bridge-Builders and Track-Layers

As soon as the surveyors had staked the line a force of graders and bridge-builders followed to excavate, fill, blast, tunnel and bridge the path for the rails. The graders were distributed in shifting camps, the foremost crew usually working from fifty to one hundred miles ahead of the oncoming end o' track, although in difficult country they were sometimes as much as two hundred and fifty miles in advance. Covered wagons took them from the nearest construction base out to their various encampments of tents, portable shacks, or, where the Indians were troublesome, dugouts roofed with sheet iron, and supplied them with food. Three or four hundred teams often plodded back and forth beside the grades. The bridge and culvert-building gangs, which used timber and heavier materials, worked near the end o' track, usually some five to twenty miles ahead.

As the speed of construction increased and the line encountered steeper grades the number of workers grew by leaps and bounds. During the summer and autumn of 1867 the grading force mustered thirty-five hundred, the track-layers four hundred and fifty, and the train operators three hundred more. In the spring of 1868, when the ascent to Sherman Summit began, a hurry call for labor was sent out and over ten thousand graders and track-layers with five hundred teams gathered in Cheyenne for the assault.

On the mountain slopes beyond over a thousand foresters were cutting and hauling timber for ties and bridges; and a total of over twelve thousand men were on the company's construction pay roll.

The Central had a still larger force, but, because of the scarcity of white labor on the Coast, eleven thousand of these were Chinamen. There was doubt at first as to whether the Chinese would prove fit for such work; but, trained and led by white foremen, they proved both capable and hardy. They could not manage animals and were in deadly terror of the Indians, but with pick, shovel and wheelbarrow they proved as industrious as ants. And they were cheap. While a grader on the Union Pacific drew $35.00 a month and his keep, with double pay for Sundays, the coolie fed himself at $30.00 a month and rarely took a holiday to propitiate some native joss with firecrackers. The Central recruited these Chinese laborers from the mines, later imported them by shiploads from Canton, and sometimes literally kidnapped them from the crews of San Francisco steamers. "Without them," says President Stanford, "it would have been impossible to complete our line within the specified time"; and even Dodge of the rival road was so impressed by their efficiency that he thought he might some day like to build a railway in China.

The graders and track-layers on the Union Pacific were of a different breed. The Casement brothers in charge of construction were both Irishmen and soldiers. They knew how to handle their own countrymen, and preferred men used to military discipline. Therefore most of the force that graded and railed the Union Pacific were Irish, and so

recently released from the army that they came to work in army shirts and brogans. Hardened by life in camp and on the battlefield they were a rough and turbulent crew, but under the strict military rule of the Casements proved admirable workers. Their camps rang with song and banter, and it was rare that an evening closed without a fight, either staged or impromptu. The entire continent echoed their chanty, with its catchy tune:

"Drill ye paddies drill!
Drill ye tarriers drill!
Oh, 'tis work all day,
No sugar in yer tay,
Workin' on the U-Pay railway.
'Tis work,
An' slave!
Ya-hah!"

A traveler who watched the building of both roads contrasted the Union Pacific camps, where the men fed on red beef and drank strong tea, coffee and raw whisky supplied by peddlers, with the Central's encampments of phlegmatic Chinese who, in loose blue blouses, their pigtails coiled under wide basket-hats, squatted on the ground about twinkling campfires, cooked their own rations and "shoveled rice out of bowls with a pair of chopsticks as fast as a white man could manage with a soup ladle."

On the heels of the graders and bridge builders followed the track-layers, picked for brawn and skill, who worked at top speed and with military precision. At sun-up the 'boarding train' in which they lived steamed noisily close to yesterday's end o' track; and from tool cars, mess cars and bunk cars (the last eighty feet long, but still overflowing

into beds on the roof and hammocks slung between the trucks underneath) poured out its crew. It then backed to a temporary siding to make room for the supply train of flat cars piled with ties and rails. The ties were loaded on wagons and tossed off, seven to each rail-length, beside the line. The tie-gangs swarmed to bed, tamp and ballast them. An iron truck which fitted the track was loaded with rails, drawn forward by a galloping horse, dumped and tipped on its side to let another pass. Eight husky rail-carriers nipped each pair of rails, ran forward and placed them for the waiting spikers, sledgers and bolters. Two rail-lengths were sometimes laid, fastened and ready for the locomotive, in less than a minute.

The telegraph poles and lines marched beside the rails. At the end of each day's work a message from the end o' track might cross the continent behind; and on the plains Indians heard the wind humming through wires and believed they were listening to the mysterious magic talk of the white men.

Dodge was everywhere — on horseback with the survey parties in the deserts and mountains, inspecting the line from end o' track to Omaha in his special armored car, or speeding back to New York or Washington for a conference. Nobody, they said, knew where he was but everybody knew where he had been. General Jack Casement tugged at his red beard and swore at the graders and tracklayers, while his brother Dan kept an endless stream of supplies rolling forward by wagon and train load from the last base. And the directors in the East spurred the work by letter and telegram.

Under this impetus the road leaped forward. The first part of the line, along the North Platte River and through gently rolling prairies, lay through the easiest country on its route; and by October the track was two hundred and forty-seven miles out of Omaha, and had reached the one hundredth meridian.

A Sight-seeing Party

As this meridian had been named as the original starting point of the railroad in the Act of 1862, Vice-president Durant took advantage of the occasion to organize the first of his famous excursions to the end o' track, intended to advertise the progress and wonders of the road and, incidentally, to promote the sale of its securities. He invited President Johnson, his cabinet, members of Congress, foreign ministers, leading editors, railroad men and financiers throughout the country. Most of them declined the adventure, but in the party of one hundred which left New York on October 15 were some distinguished persons. There were several senators and congressmen, Rutherford B. Hayes, later to become President, John Sherman, the brother of the General, Robert T. Lincoln, son of the President, the Earl of Arlie from England and the Marquis of Chambrun from France. George M. Pullman, the inventor of the new "palace hotel and sleeping car wherein even a lady might disrobe with propriety," was also in the party. They travelled five days by rail and stage to St. Joe on the Missouri and two more by steamboats up the river to Omaha — a week's journey from New York. At Omaha they were joined by fifty prominent citizens and their wives;

and the little town, proud of its new importance as a railroad terminal, entertained them at a ball.

On October 23 the excursion train of nine cars, drawn by two flag-decked locomotives, started west. It carried a caterer, a band, two photographers, three 'tonsorial artists' and a sleight-of-hand performer. Vice-president Durant received his guests in the 'Lincoln Car' in which the President's body had been borne from Washington to Springfield, and which Durant bought from the government as his private property — and, it is to be hoped, at his own expense. Lunch, with champagne and other beverages from the 'saloon car,' was served on board. At Columbus, ninety miles out, the party found an illuminated encampment prepared for them, supped, slept in tents on hay mattresses under Buffalo robes and were lulled to sleep by the howling of distant coyotes. At dawn they were awakened by terrifying war-whoops — the camp was surrounded by Pawnee Indians! Some of the ladies nearly fainted till Durant explained that it was only a staged attack and that the Pawnees were army scouts in war paint. The train moved on again past the one hundredth meridian, its original destination, for, lo! the magic road had lengthened thirty miles while the party had been on its way from New York. They supped and slept in another encampment at the two hundred and seventy-fifth mile post. Next morning there was a hunt of buffaloes and antelopes, rounded up in droves so that even an amateur hunter could hardly miss them; then ten miles more of train to the end o' track where they watched Jack Casement's 'paddies' lay eight hundred feet of rails in half an hour as an exhibition stunt. That evening, after a display

of fireworks, they slept again on the plains, and next morning, after much photographing, boarded the train for the return journey to Omaha. En route they stopped at a prairie-dog town twenty-five miles square, and passed through a prairie fire thoughtfully prepared in advance by Durant. When they reached Chicago there was a grand meeting in the Opera House and speeches in eulogy of the road's achievement, which were telegraphed over the country to impress the public — particularly the investing public. Durant proved himself at least a master showman.

North Platte, First of the 'Roaring Towns'

In November the track reached North Platte, two hundred and ninety-four miles out, where the traveller nowadays changes his watch from Central to Mountain time. Here the railroad established its construction base for the winter. On November first the only settlers in the place were prairie dogs; on the twenty-second the town had a human population of over a thousand. The railroad built a roundhouse for forty locomotives (though there were but ten on the road as yet) and a wooden depot. Dan Casement set up his famous portable quarters, transported in numbered sections and knocked together on the spot, of a bunk house, a dining room, a large warehouse and a general store. The framework of the 'Railroad Hotel' began to rise, there were twenty or thirty other shacks or buildings and every building seemed to house a saloon and every saloon was a gambling joint, or worse.

Through the winter North Platte grew apace. The railroad's graders and teamsters gathered here for the spring

opening, west-bound Mormon emigrants on their way to Salt Lake, gold seekers for Montana and overland travellers waiting for the stage-coaches for Denver filled the town; and gamblers, saloon and dance-hall keepers, prostitutes and confidence men swarmed to batten on the temporary population.

When in May the railroad moved to its new base at Julesburg, eighty-four miles beyond, North Platte had a population of five thousand. In six weeks it shrunk to less than five hundred. It was the first of the 'roaring towns,' appropriately called 'hell-on-wheels,' which sprang up like mushroom growth along the line and then dwindled away as further bases were established. Today North Platte is a flourishing modern city with a Carnegie Library, government air mail station, agricultural experiment farm and all modern improvements, situated in the center of an artificially irrigated district which produces quantities of wheat, sugar, beets and alfalfa and grazes great herds of livestock — all thanks to the Union Pacific.

Progress during 1866

During the construction year of 1866, which ended on December 11 at the three hundred and fifth mile post, two hundred and sixty miles of track had been laid in exactly eight months, or more than a mile for each working day. The construction and equipment had cost some sixteen million dollars. Meantime the Central Pacific had built only ninety-two miles, but it was struggling through the snows and passes of the Sierras. The Union's mountain climbing lay ahead.

During the winter Dodge went to New York and submitted his plan for building directly west through the Lone Tree Pass instead of striking south to Denver. The directors (except Durant) immediately approved, and the new surveys were filed in Washington. A delegation from Denver angrily protested; but the economy of the new route was obvious, and Denver had to be content with the promise that a spur line should be built from there to join the Union Pacific at Cheyenne.

Progress during 1867

Work was resumed on April 15, 1867. The next six hundred miles of the most difficult part of the line was built under the Oakes Ames contract. The railroad had now reached what was known as the rainless belt, and through the mountain and desert regions the land grants were considered worthless. The value of the company's securities shrank alarmingly, and in his contract Ames had agreed to take payment in stocks and bonds at par and place them at his own risk. Vice-president Durant had bitterly opposed this contract from personal motives, but he was now steadily losing influence; and when in 1866 General Dix, heretofore the nominal president of the company, resigned, and Oliver Ames was elected to succeed him Durant's animosity against the Ameses increased and came to include chief-engineer Dodge upon whom they steadfastly relied. But as vice-president and director Durant still had plenty of scope for his restless activity, especially since the increasing financial burdens of the company kept the Ames brothers busily occupied in the East.

Nevertheless Oliver Ames did make a hasty trip of inspection over the road shortly after he became president. Dodge told him of his disagreements with the vice-president, and added bluntly, "Durant is in the way." Ames considered a moment and then sat down and wrote, as an official message: "It shall be the duty of the chief engineer of the Union Pacific to take charge of all matters pertaining to its construction." This strengthened Dodge's hand, although it did not quell the headstrong Durant.

Dodge had hoped during 1867 to build as far as Fort Sanders before winter stopped the work. This meant laying two hundred and seventy miles of track and crossing the Rockies; but he counted on his new expert construction crews and the fact that a railroad had reached the farther banks of the Missouri River by which supplies from the East might be forwarded more speedily. But there were unforeseen difficulties. Floods in western Nebraska tore out miles of track, bridges and telegraph lines which had to be repaired. In Wyoming Indians swept down from the ravines of the Black Hills, pulled up surveying stakes, stole teams and drove back the engineering parties. They raided grading camps near Cheyenne, killed workmen, stampeded animals and burned tents — and so on all through the year.

In a moment of discouragement Dodge exclaimed to the federal commissioners, "We've got to clean the damn Indians out or give up! The government may take its choice." The military officials urged him to halt work for six months until enough soldiers could be recruited for adequate protection, and sent the same message to the directors in New York; but Dodge recovered his spirit.

"If we stop now," he wrote Oliver Ames, "we may never get started again. I intend to push this road through to Salt Lake before 1869 or surrender my own scalp to the Indians." During the summer, to establish the final location lines of the road, he visited all the far-flung surveying camps from Evans Pass, through the one hundred and fifty miles of Laramie Plains, across the Red Desert and over the Wasatch range to Salt Lake City, where he was enthusiastically welcomed by Brigham Young as the harbinger of the railway.

Meantime the Casements drove the track forward. The season's work began with a force of three thousand five hundred graders, four hundred and fifty track-layers and three hundred train operators. Back at Omaha the banks of the Missouri were being stripped of timber for ties and bridges, the company was running nine saw-mills and several steamboats, and thousands of tons of rails, ties and supplies were piling up to await transportation. By early June seventy-two miles of track had been laid to Julesburg on the edge of the Colorado border, which superseded North Platte as the construction base.

When the railroad reached Julesburg that settlement had a population of forty men and one woman; by the end of July there were four thousand. Lots sold by the railroad's advance land-agent for two hundred dollars were reselling for a thousand. The streets, ankle-deep in sand, were lined with stores, piled with goods fresh from New York and Chicago, and with saloons and gambling joints, most of them contraptions of canvas, sheet-iron and rough lumber, sometimes with false fronts painted to imitate stone or stucco, which could be erected or knocked down in forty-

eight hours. Everybody seemed to have money — it was easy come and easy go. The Julesburg House served elaborate banquets, including game, pastries in variety and wine, for twelve bits, or $3.00, a head. Liquor dealers counted on a profit of eighty per cent. The shirtfronts of gamblers glittered with diamond studs. At night the great dance hall, 'King of the Hills,' with its fifty-foot bar, was ablaze with kerosene lamps, and the girls, with dainty pearl-handled revolvers dangling from rattlesnake-skin belts, danced and drank with the motley crew of graders, clerks, teamsters, cattle rustlers, tender-foot tourists, soldiers and riff-raff of all sorts. Out on the darkened plains beyond hundreds of campfires twinkled.

The town soon earned its title of the 'Wickedest City in America.' Every night guns barked, and almost every morning the graveyard took its toll of "a man for breakfast." Finally things came to such a pass that General Jack Casement, with a picked gang from his hard-fisted construction crew, went back to clean out the most flagrant of the gamblers and gunmen and restore some semblance of law and order. When Dodge asked him what he had done General Jack pointed to the graveyard. "We planted them out there where we were sure they would stay peaceful," he said. "They died with their boots on."

But the rails did not linger at Julesburg; they were marching straight for the Rockies at an average of a mile a day. By mid-August end o' track was four hundred and thirty miles from Omaha with graders working one hundred miles ahead. Early in September the road entered Wyoming, and it was decided that next winter's base-town would be

Cheyenne where the traveller first sights the snow-clad peaks of the mountains. Thereupon all Julesburg folded its tents and moved forward to Cheyenne, ready to meet the first pay car, leaving nothing behind except a station, a station master, a graveyard, heaps of litter and mounds of broken bottles. When, on November 13, the track reached Cheyenne the town had four thousand citizens, a mayor and a city government. The first passenger train from the East arrived next day and was welcomed by a brass band.

Throughout the winter Cheyenne grew apace, and before the railroad made its spring move to the next base had a population of about ten thousand. It was Julesburg over again on a larger scale, with more dance halls and gambling joints, and rivaled Julesburg in lawlessness until the first Vigilance Committee was formed with 'Judge Lynch' presiding. The worst of the malefactors, after a speedy trial in which the jury never disagreed, dangled at a rope's end. Other undesirables were urged to betake themselves elsewhere. "We'll give you fifteen minutes to leave town. Thar's your mule," said the Vigilantes to one. "Gentlemen, I thank you," he replied. "If this damn mule don't balk I don't want but five."

Beyond Cheyenne the tracks began their charge up the slopes of the Laramie range. From Omaha to Cheyenne they had climbed only five thousand feet in about five hundred miles; now to reach the Sherman Summit of Evans Pass they must make a grade of ninety feet to the mile and often blast their way through granite walls.

At this juncture Durant again interfered. Upon the advice of his henchman, consulting engineer Seymour, whom he

was hoping to promote to Dodge's place, he tried to alter the Evans line through the pass, and the matter had to be referred to New York for settlement. Work stopped for the winter in December, with the end o' track eight thousand feet in the air and ten miles east of Sherman Summit. This was thirty miles short of Fort Sanders which Dodge had set as his goal; but during the year two hundred and forty miles of rails had been laid, only twenty less than in the previous year, and through more difficult country. The cost for construction and equipment was about fourteen million dollars.

The Central Pacific also had meantime made spectacular progress. It had surmounted the Sierras, crossed the California border into Nevada, and now had a straightaway course of six hundred miles across the desert to reach the coveted Salt Lake Valley. The Union Pacific had one hundred miles less to build before it reached the Valley, but these lay across Sherman Summit, the highest point on the line, and the Continental Divide beyond, then through the waterless Red Desert and over the snow-bound passes of the Wasatch range. The race seemed to be in the Central's favor.

This winter (1867–68) Dodge was obliged to go to Washington to sit in the 40th Congress. He had been elected against his wish and almost without his knowledge; indeed, he himself did not vote because he had forgotten it was election day. But, from a special office which the Department of the Interior set apart for him, he kept in constant touch with the railroad's affairs. Oakes Ames was a member of the same Congress, and the personal association strengthened their mutual esteem.

The directors of the Union Pacific now made a bold and

startling decision. They determined that the road must, at all costs, reach Ogden, the key to the Salt Lake region, before the Central, and build on so much farther west that when the lines met the latter would be shut out from the Mormon settlements and the Union control the traffic. They therefore wished Dodge to complete his surveys to Salt Lake City in a month, and run them two hundred miles beyond to Humboldt Wells in three — work which would ordinarily take eight months of fast surveying. They also planned that the four hundred and eighty miles of track from Sherman Summit to Ogden should be laid without a halt, which meant building over the Wasatch Mountains in winter. Dodge was appalled at the cost of such unprecedented speed of construction and winter work. He estimated it at ten million dollars extra; but Oakes Ames, upon whom the burden would fall, agreed with the other directors. The long haul for passengers, freight and mails must be won, and every additional mile of track meant thousands of dollars in government and company bonds and land grants. "Go ahead," Dodge quotes Oakes Ames as saying, "the work must not stop even if it takes the shovel shops."

These shovel shops in Easton were now turning out nearly a million and a half shovels a year to supply the Union Pacific, the Central Pacific — for Ames shovels also built the rival road — and other lines that were under way in the East; and the junior members of the family, Oakes Angier Ames, Oliver Ames 3d, and Frederick Lothrop Ames, who were now in charge, were distributing bonuses, not in currency but in prized gold pieces to every workman who turned out more than his allotted quota.

Dodge dispatched his first surveying party to Humboldt Wells on February 26, 1868. They crossed the Wasatch passes on sleds over snow-drifts that topped the telegraph poles. They were to work east until they connected with the other engineers who would meantime be working west to meet them. Early in April, as soon as the ground had thawed, Jack Casement released his construction crews. Five hundred teams toiled out of Cheyenne, and nearly ten thousand graders and track-layers followed (most of them sober now, stone-broke and eager for pay day) to complete the climb to Sherman Summit, build a bridge beyond, 125 feet high and 1,400 long, for the descent into Laramie Plains and then drive on westward.

On May 9 the end o' track reached Laramie, and the next afternoon passenger and freight trains followed. For three happy months Laramie held high carnival till, late in July, Benton, the next base, was reached and Hell-on-Wheels moved one hundred and twenty miles west again. Meantime, Cheyenne, shrunken in population from ten thousand to fifteen hundred, settled down to be a respectable town, destined to become the capital of Wyoming, one of the chief centres of cattle raising in the northwest and the first city in America to be lighted by electricity.

In July Dodge was in camp near Salt Lake City directing the surveys when he was summoned by telegram to return post-haste to Fort Sanders and meet Grant, Sherman, Sheridan and a party of distinguished army officers who had come out to look into Indian troubles and adjust some mat-

ters in dispute about the railroad. Vice-president Durant had several times induced assistant engineer Seymour to change Dodge's lines while he was absent, and the government commissioners were puzzled as to who was in authority.

Dodge arrived at the Fort on July 26, but Durant was there before him. He had seized this opportunity to impress Grant, now sure to follow Johnson as the next President, with his faithfulness as a watch-dog of the road, and, if possible, to weaken Dodge's authority. As soon as Dodge had greeted the visitors Durant rose and boldly accused him of extravagance (a strange charge from that source) of selecting undesirable routes, of ignoring the advice of his associates, and, above all, of delay in locating the line into Salt Lake City. When he finished there was an embarrassing silence, for Dodge offered no defence. Grant, sitting astride a cane-bottom chair, puffed at his cigar, and Sherman's seamed face was immobile. Finally Grant spoke. "Well, what about it, Dodge?" he inquired. "Only this," said Dodge slowly, "if Mr. Durant, or anybody connected with the Union Pacific, or anybody connected with the government, changes my lines I'll quit the road." Grant's eyes travelled from Dodge to Durant and back again. He knew the chief engineer from long association; he had heard of Durant's contentions with the Ameses and the other directors and had formed an unfavorable opinion of him. After a moment's thought he said deliberately, "The government expects the railroad company to meet its obligations. The government expects this railroad to be finished. And the government expects General Dodge to remain with the road as its chief-engineer until then."

Durant had lost the day, but he was too astute to oppose the man so soon to become President. "Of course," he said, "we all want Dodge to stay with the road. I withdraw my objections." And, once more becoming the tactful host and showman, he escorted the party a hundred miles farther to the end o' track where the ex-soldiers among Jack Casement's tarriers greeted 'Old Bill' Sherman, 'Little Phil' Sheridan and 'Unconditional Surrender' Grant with Union cheers commingled with a few friendly rebel yells, and proudly exhibited their speed in track-laying.

Salt Lake City Is Sidetracked

Dodge staged back again to Utah. He had a perplexing problem to face. It was true he had not yet announced the line into Salt Lake City because his final surveys led to the unexpected conclusion that the railroad ought not to touch the Mormon capital at all, but should run north of the Lake instead. Now Salt Lake City had been considered the road's prize goal by the whole country. To skip it would, moreover, so offend Brigham Young, who was all powerful in Utah, that he might make building through that Territory extremely difficult.

In Salt Lake City Dodge found Chief-engineer Montague of the Central Pacific, and frankly told Montague of his decision. "I don't intend," he said, "to run the Union Pacific into Salt Lake City. I have found a better route. Our tracks are sure to reach Ogden early next March before yours can be within a hundred miles of it. Why don't we do the sensible thing and agree on some meeting point farther west?" Montague was in a quandary. He confessed

that his own surveys substantiated Dodge's judgment about avoiding Salt Lake City, and had already recommended that the Central's line should also run north of the Lake; but his directors were afraid of Brigham Young's resentment and intended to withhold the news as long as possible.

The directors of the Union Pacific, however, had already authorized Dodge's route, and as he saw no gain in postponing an evil day, he went straight to Young and told him of the decision. The Apostle was furious. At a meeting in his great tabernacle he accused Dodge of having been influenced by the Devil to ignore the Lord's manifest intent, and ordered his followers in Utah and Nevada not to work for or supply the Union Pacific, but to oppose its progress and to favor the Central in every possible way. This forced Dodge's hand, and he asked for an opportunity to explain more fully all the facts in the case. Young summoned his Twelve Apostles, and Dodge showed them the various surveys. He had even sounded the Lake itself in the hope of bridging it, but found this far beyond the means of the company. (It was done thirty-four years later by that miracle of engineering, the Lucin Cut-off, at a cost of $4,500,000.) He also pointed out that, as the Union would surely distance the Central Pacific into Ogden and run beyond, the two roads must inevitably join so much farther west that the Central would make no attempt to reach Salt Lake City. Finally, he promised that the Union Pacific would build a branch to connect it with the main line as soon as that had been completed.

Brigham Young was too shrewd not to grasp the logic of these arguments, and at another tabernacle meeting he told

his followers that the Lord had sent him a revised 'vision,' and now commanded the Mormons to help instead of hinder the Union Pacific. He further proved his business acumen by making all the profit possible for his church and people out of furnishing both roads with supplies (hay at one hundred dollars a ton, for example) and labor.

Dodge now made a last, but futile, effort to halt the extravagant race of both roads toward an undetermined goal. He tried to get the Union Pacific's vice-president to propose to the directors of the Central that the lines should meet at some midway point west of Ogden. "But," Dodge writes, "Durant stormed over my proposition, for each mile we could push our track meant thirty thousand dollars in subsidies beside the land grants." Neither road was yet prepared to slacken its pace. Accordingly, Dodge instructed his surveyors to lay the final location lines with all possible speed and spurred on the Casements' construction crews.

They needed no urging. The tracks had marched down from Sherman Summit to Laramie at the rate of a mile a day, and swept across the rolling Laramie Plains at an average of two. But after Benton, the next base, which was reached late in July, they encountered a different region. Benton lay on the eastern edge of the desolate Red Desert. Not a tree, nor a spear of grass, was anywhere visible. Water, fetched three miles, sold for ten cents a pail; but, as whisky could be bought for twenty-five cents a drink, water was mostly consumed by the animals.

The Red Desert, which stretched ahead for one hundred and forty miles, is the dry bed of an immense prehistoric lake, rimmed in by hills, eroded into strange pinnacles,

stained all colors from russet to vermilion, and as scorched and bare as if seared by lightning. Its surface is covered with a red sand into which the streams from the hills sink and disappear, though distant mirages mock the traveller with visions of phantom lakes. Here, it was said, even a jack-rabbit had to carry a haversack and canteen; and one surveyor suggested that the railroad furnish him with self-irrigating camels instead of horses. The plateau lies so high that under the blazing midsummer sun the animals sickened in the heat, yet at night the temperature might fall to freezing.

Track-laying necessarily slackened now, but speeded again as the grade rose to cross the barren, wind-swept Continental Divide, 7,164 feet above sea level, and then climbed down into the dreaded Bitter Creek Basin where there was water, but so rank with salt or poisoned with alkali that neither man nor beast could drink it, and it corroded the boilers of the engines. Graders took what they could get, teamed in barrels and brackish when it reached them. To the track-layers tank cars brought it, perhaps a hundred miles; and only occasionally could Casement pause long enough to bore artesian wells. Every bit of food for man and beast was now being hauled some eight hundred miles over a single track from Omaha, and every mile of construction used up forty carloads of material. Yet when, in late September, the rails left Bitter Creek behind and reached Green River they still had been laid at the astonishing average of two miles a day.

Where the grades were favorable Jack Casement's construction crews hung up astonishing records. Four, five and six miles were laid ready for the locomotive between

sunrise and sunset. But the track-layers on the Central Pacific, called 'Crocker's Pets' from the name of their chief, were making equal speed through Nevada. The telegraph lines of both roads were now connected via the Overland Stage wires, and the race made front page headlines. The East cheered on the Union, the Coast the Central Pacific. When Casement's crew laid six miles in a day, Crocker's pets countered with seven. "No damn Chinamen can beat me laying rails," swore General Jack, and, near Granger, laid seven and a half. Crocker heard, and telegraphed, "the Central promises ten miles in one working day." This seemed an impossible boast, and vice-president Durant wired from New York, "Ten thousand dollars you can't do it before witnesses," to which Crocker calmly replied, "We'll notify you when we're ready."

The roaring towns strove bravely to keep up, but the pace had now become too swift and the distances too great. After a short month Benton shriveled away to nothing, and is not marked even by a station on the road today; and at the bases farther west, Bryan, Wasatch, Corinne and Blue Creek, although the moving settlements attempted to roar they only succeeded in braying.

Winter Work in the Wasatch Mountains

I imagine General Jack Casement might smile somewhat grimly could he read Baedeker's guide-book which complacently informs the modern traveller that "between Green River and Bryan the construction of the line deserves attention," and that "beyond the snow-clad peaks of the Wasatch Range come into view." He had probably noticed

both facts. It was now October, and his tracks must reach and climb those snow-clad peaks and then drop into the Salt Lake Valley during the winter to reach Ogden by March. Winter came late that year, but in November it closed in in earnest when the end o' track reached Aspen, 7,540 feet above sea level and second only to Sherman Summit in altitude.

The Oakes Ames construction contract had ended some twenty miles back, and Oakes Ames resources were nearly ended too. From now on the work was carried forward by such temporary contractors as were willing to risk fighting grades, speed, snow and cold together; and when none would take the gamble the work was pushed forward without figuring costs, for the Ameses were still game. "Save the credit of the road." Oakes Ames wrote Dodge, "even if I have to fail." The workmen struck for three dollars and a half a day and seven for Sundays, and got it. The more pious Mormon graders who supplemented the Union's force valued their Sabbaths at ten.

Each section of the road had to be approved three times by different federal inspectors before warrants could be issued for payment of the construction bonds. Most of these officials proved conscientious and honest, despite a tendency to order their private car to a siding and take a camping trip where the fishing was particularly good; but there was an occasional black sheep among them. One now demanded a trifling gift of $25,000 before he even would inspect a finished section of the line. "It will cost you more than that," he said, "if I take my time"; and he was right. The company was paying nearly half a million dol-

lars interest a month for borrowed money. He got his 'present.'

From Aspen the track toiled across a trestle six hundred feet long to drop a thousand feet across the Utah boundary to Wasatch, the next base, but still a mile and a quarter in the air. Here snow buried the tents and shacks to their roofs, and the grades had to be shoveled through white-walled ravines. Tracks were sometimes laid on ice, and a whole train, loaded with iron and ties, slid into a canyon. The earth was frozen so hard that, like the rocks, it had to be blasted with nitroglycerin. Back on the Laramie Plains blizzards stalled supply trains for weeks at a time; and the construction crews, buried in their quarters, raged at the delay, for they knew that the Central was coming on fast across the Nevada desert. Vice-president Huntington of that road arrived by stage to watch the struggle. He saw the men warming themselves at fires of railroad ties, the only fuel. It was so cold they could not work otherwise. "On one of the fires," he said, "I counted from twenty to twenty-five ties, and I knew each tie cost the U.P. six dollars." But there was no halt in the work. Late in January the spectacular gorge of Echo Canyon ("wonderful scenery" says the guide-book) was put behind, and the first engine roared past a lone pine in Weber Canyon which bore the sign "1000 miles from Omaha, 31 miles from Ogden."

Ogden to Promontory Summit

The track head entered Ogden on March third, 1869, and was greeted by brass bands and banners reading 'Hail to the Highway of the Nations.' But Ogden was not the goal.

At the very least Promontory Summit, north of Salt Lake, must be reached to make sure of shutting the Central completely out of the Valley. True, this meant but fifty-two more miles of track-laying, but it involved a steep climb over treacherous gulleys that required high, curving trestles. The Central was nearly one hundred miles west of Ogden, but it was traversing easy country and making wonderful speed. Therefore, although the Union had already almost completed grading its line to Humboldt Wells, two hundred miles west of Promontory, it now abandoned hope of being able to track that section. The graders there were called in, and day and night shifts started to lay the rails along the northeastern side of Salt Lake and climb Promontory ridge.

Between Ogden and Promontory the Union's graders encountered an advance guard of the Central Pacific graders, for the Central aimed to build as far east as Echo Canyon, and the survey lines of the two companies ran side by side in parallel lines as if destined never to meet. In some sections the crews worked within hail of one another, and as the Central's graders were Chinamen, highly despised by the Union's Irishmen, there was much bad blood. The Irish started a playful game of firing their blasts without giving warning to the Chinese, and several of the latter were severely hurt. In spite of peremptory orders this form of amusement continued until one day the Chinamen retaliated by laying what was called a 'grave,' and fired their charge just above Casement's tarriers, killing two of them and burying several. This brought about a truce, and thereafter the Irish showed more respect for their Oriental rivals.

The Union Pacific now encountered a staggering setback from the hostility of the administration in Washington. It appeared to close observers at the Capitol as if President Andrew Johnson were jealous, though perhaps unconsciously so, of the affection in which the country held Lincoln. It became almost instinctive with him to oppose anything which Lincoln had favored, and it was well known that the Union Pacific Railway was Lincoln's cherished project. Johnson was also suspicious of Grant and Sherman, the military heroes of the War, whom he suspected of trying to keep in the public eye by their Indian campaigns. He repeatedly refused them enough troops to bring these to a speedy close, and continued to allow traders to sell the savages firearms. Indeed, much of the Indian damage done the Union Pacific was due to Johnson's vacillating policy. As his Secretary of the Interior, who would have supervision of railroads, he appointed Orville H. Browning; and Browning's personal animosity toward Lincoln was so great that even after Lincoln's assassination he dared to accuse Mrs. Lincoln of stealing the White House silver. Browning was, therefore, prone to lend an ear to all complaints against the Union Pacific, and astute Vice-president Huntington of the Central was not slow to take advantage of it.

When Browning learned of the Union's intention to extend its line as far west of Ogden as possible, prompted by Huntington he wrote a sharp letter to President Oliver Ames ordering him to end construction not farther than

forty miles west of Ogden. As this was in flat contradiction of the act of Congress which authorized both roads to build on "until they should meet," Ames disregarded the order. Then Browning struck. On the day the Union's tracks entered Omaha he directed that $1,400,000 of government bonds should be issued *in advance* to the Central Pacific for building its track between Promontory Summit and Echo Canyon, although the Union Pacific had already graded most of this section and tracked some of it. Browning's order practically said to Ames, "build on west of Ogden if you like, but you will do it without a dollar of government subsidies, since I have already assigned these to the Central."

This blow almost floored the Union Pacific with its exhausted treasury, and even Oliver Ames grew pessimistic. "We may have to quit," he wrote Dodge; and Dodge had but one word of hope to offer. "Things may be different after Grant's inauguration," he answered. He had already interviewed the incoming President to protest against Browning's attitude; and now urged his close friend, Sherman, slated for Secretary of War, to explain the situation fully to Grant and suggest that an independent investigation be made into the affairs of both roads. "Please say to Grant in confidence," he wrote, "that I think he should hold up the bonds of both companies until their tracks are completed. I have no doubt that both will complete according to all requirements, but in any event I want Grant to be safe and not to be misled by either."

Grant took this advice. Browning's order was the last official act of Johnson's administration, issued only the day

before Grant's inauguration. The first official act of the new President was to annul it, and prohibit the issue of government bonds to either road pending the report of a new commission.

The extravagance of the race had brought both companies so near bankruptcy that this indefinite withholding of federal funds made them willing, indeed eager, to compromise. Their directors finally agreed that the tracks should join at Promontory Summit, but that the terminus of both roads should be at Ogden. The Union was to build the line from Ogden to Promontory, and the Central was to buy this section from the Union for something over a million dollars. It was half a loaf for each. The Central gained Ogden as its terminal, and the Union was to receive the government bonds and land grants for the line between Echo Canyon and Promontory Summit. When the officers of both roads appeared in Washington and stated their agreement, Congress, immensely relieved to get out of the trouble it had caused by the Amendment of 1866, solemnly ordered that the tracks should join at Promontory, and the race was over.

This enactment was passed on April 10, when each line was about fifty miles from Promontory. Though there was no further need of haste there was keen rivalry between the crews as to which should reach the final goal first. Both sides laid off workmen all along their lines, and kept only the most expert graders, bridge builders and track-layers for the remaining stretch. The Union Pacific had the more difficult approach to the summit with a climb that required two great trestles, the largest 500 feet long and 87 feet

high — which, thank Heaven, the Central Pacific would have to pay for. The last forty-six miles were tracked in thirty days, but only by working day and night shifts.

On April 29 Crocker, the construction superintendent of the Central Pacific sent word to the Union's engineers, "tomorrow we will lay those ten miles of rails. Bring your witnesses." He had craftily waited until the Union's end o' track was within six miles of Promontory, so that their crew could not retaliate. The Union men took a holiday to witness the feat, and watched Crocker's Chinamen, led by a picked squad of Irish, make an all-time record. Between seven o'clock in the morning and half-past one they laid six miles of track — one hundred and forty-four feet a minute, as fast as a horse might walk — and between half-past two and seven in the afternoon they had completed their ten miles with a few hundred yards added for good measure. Though the Union men generously applauded this extraordinary exhibition they were not as impressed as they might have been, for the Central had bedded every tie, and distributed material all along the line in advance, while the Union's record of seven and a half miles had been made without previous preparation. Next day both companies finished their tracks to Promontory, leaving only fifty feet to be joined at the final ceremony.

In the final spurt of thirteen months the Union Pacific laid five hundred and fifty-five miles of main track and one hundred and eighty miles of sidings, seven hundred and thirty-five miles altogether, and completed its line seven years before the time limit set by the government. During the same period the Central laid five hundred and forty-

nine miles of main track. The records were about even; but the Union had overcome greater difficulties in crossing the waterless desert in midsummer and building over a mountain range in winter.

The Joining of the Rails, May 10, 1869

The date for joining the rails was set for May 8, and President Stanford of the Central Pacific arrived in a special car with a party of distinguished guests the night before; but the Union Pacific was not ready. Floods had washed out sections of the track in Wasatch Canyon, and a train loaded with excursionists from the East, eager to make the first coast to coast journey, was stalled beyond Ogden. Two days were needed to repair the damage.

The morning of Monday, May 10, dawned fair and cold. The Union Pacific delegation arrived in the forenoon, headed by Vice-president Durant, arrayed in a black velvet coat and a tie said to outshine the brilliancy of the golden spike. The government sent four companies of infantry, and Salt Lake City a Mormon band resplendent in new uniforms. A second train bringing delegates, reporters and others followed on each line, so that, including track-layers and other workmen, about a thousand persons gathered on this remote spot in the Utah desert, five thousand feet in the air and bare except for sage-brush, but at the moment the world centre of interest. President Oliver Ames, his brother Oakes of the Union Pacific and Vice-president Huntington of the Central were not present. They were too busy with their financial burdens in the East.

From a single telegraph pole opposite the gap in the rails

a flag snapped in the wind; and to a small table below dangled a pair of telegraph wires that now connected all stations from the Atlantic to the Pacific and south to the Gulf of Mexico, for all lines had been cleared to receive the news that the great national railway was complete at last. The preliminary warning read, "Everybody keep quiet. Just before the last spike is driven we will say 'done.' Then listen for the strokes of the hammer."

From President Stanford's car the last tie and the golden spike which was to unite the rails were borne with ceremony. The tie, polished California laurel, bound with silver and suitably inscribed, was laid in place, followed by the two last rails, one carried by a picked squad of Jack Casement's paddies, the other by Crocker's clean-frocked Chinamen. Various dignitaries were invited to drive home the preliminary spikes of silver and iron presented by Nevada, Arizona, Idaho and Montana; and finally the golden spike from California was set in a hole prepared for it and connected with the telegraph wires to transmit the strokes that were to drive it home. The telegraph clicked, "Almost ready. Hats off. We are praying." Then Stanford, Dodge and others made brief speeches and led cheers; the band played, the engines tooted, and "we all," says one spectator, "yelled fit to bust." Finally the telegraph signaled, "Ready to drive the last spike. Done. Watch for the sound of the blows." In silence President Stanford stepped forward, and, with a silver-headed maul, made the first stroke. But he was nervous and struck the tie instead; and Durant, who followed, missed also, perhaps from instinctive courtesy. The expert sledgers of the crews could hardly restrain

their groans; but the telegraph operator obligingly signaled the blows as though they had been struck — sounds compared by an enthusiastic press to the shot at Lexington heard round the world. The spike was driven home by Engineers Dodge and Montague who proved better marksmen.

The tick recording the first blow was received in Washington at 2.47 P.M. and dropped a magnetic ball on the dome of the Capitol. In San Francisco the bell on City Hall repeated the strokes and two hundred cannon roared in answer. In New York a hundred guns were fired, and the chimes of Trinity Church pealed a Te Deum. Liberty Bell in Philadelphia sounded its cracked note. Chicago celebrated with a four-mile-long procession. In Salt Lake City the tabernacle overflowed; and in Boston Faneuil Hall, cradle of American liberty, echoed with patriotic speeches.

The first message, telegraphed to President Grant, read:

Promontory Summit, May 10, 1869.

The last rail is laid, the last spike driven. The Pacific Railroad is completed, 1086 miles west of the Missouri River, 690 miles east of Sacramento City.

The second was to Oliver Ames:

The last rail was laid today connecting the Union Pacific with the Central Pacific at Promontory Summit, 2500 miles west of Boston, 690 east of Sacramento. This will have an influence upon the future and upon the commerce of the world that no one can today estimate. We congratulate you upon the success of the enterprise.

To complete the ceremony the foremost engines of each road were uncoupled from their trains, and, loaded with everyone who could find a place to cling, crept forward until their pilots touched, and the engineers clashed together

bottles of champagne which foamed down on the last tie. Then the locomotives backed away, picked up their cars again, and the first train of the Union Pacific crossed the joined tracks and then withdrew to allow the Central's train to make the crossing. The rails from east to west were linked at last.

Scarcely was the ceremony over when the track-layers rushed to jerk out the precious spikes and the last tie which the knives of souvenir hunters were already reducing to splinters. Indeed they whittled away six more 'last ties' of ordinary wood before they lost count. At nightfall the two engines were again run forward until their pilots met; and Bret Harte, poet of the West, wrote:

> What was it the engines said,
> Pilots touching, head to head,
> Facing on a single track,
> Half a world behind each back?

Next morning, May 11, the first passenger train bound for California passed through, and the Union Pacific and Central Railways were in operation at last.

The return journey of Vice-president Durant and his guests was rudely interrupted one hundred and fifty miles from Promontory Summit. At Piedmont Station warning gunshots halted the engine, and a pile of ties blocked the track — not Indians now, but three hundred unpaid graders and track-layers. They announced that they intended to hold Durant as a hostage until their overdue back pay was forthcoming, shunted his car to a siding and put it under guard. For the first time the vice-president seemed reluctant to assume a leading role, and protested that he was not re-

sponsible, but in vain. Oliver Ames, fearful lest he meet with bodily harm, telegraphed Dodge to release him at all costs, which Dodge finally managed to do by borrowing from a Salt Lake banker. But he warned Ames that other unpaid employees would be sure to imitate those at Piedmont and hold up traffic all along the road. Nearly a million dollars was needed immediately to pay off the company's debt to its workmen, contractors and others. The moment was crucial; but the Ameses managed to raise the money somehow, just in time to avert a general tie-up.

THE FINANCING OF THE RAILROAD AND THE CREDIT MOBILIER

I WAS A BOY OF 11 WHEN THE OAKES AMES MEMORIAL HALL, given to the town of Easton by his sons Oakes Angier and Oliver 3d, was dedicated. The stage was filled with celebrities — the Governor and members of the State Legislature, national congressmen and Senators, college presidents and clergymen — among them the shaggy Edward Everett Hale. And there were speeches — too many I thought. I knew that my grandfather had been the leading spirit in building the Union Pacific Railway and expected that most of the speakers would extol that achievement. Some of them did; but the majority dwelt on my grandfather's personal character and especially his inflexible honor. I remember a story told by one speaker, a banker — how he had wanted to sell the personal note of a manufacturer and had offered it to Oakes Ames. Oakes said he would buy it, but being just on his way to Washington could not take it up at the moment. He would do so when he returned. But before he returned the maker of the note was unexpectedly declared bankrupt and it was practically valueless. Of course the banker thought this ended the transaction with Oakes Ames, but no, when he returned from Washington he called at the banker's office and asked for the note. The banker told him that the maker was insolvent. I know it, said Ames, but I

didn't know it when I said I'd buy the note. I'll take it now, and he insisted on doing so at the price originally agreed upon. And there were other stories of similar tenor. As I listened in the crowded hall I wondered why so many of the speakers had chosen to expatiate on my grandfather's personal character and in particular his unblemished honor. That I took for granted. All Ameses were honest.

On the way home from the ceremony walking beside my father, I asked him why considering my grandfather's many achievements so many of the speakers had chosen this topic. "It was because" he said "your grandfather was accused of having tried to influence legislation in Congress by unfair methods, and was publicly censured by the House of Representatives. It was an unjust accusation, and was due to the fact that Congress was scared out of its wits by a trumped-up scandal invented by some newspapers as a campaign issue during a national election. A number of prominent congressmen were accused of being involved. They were frightened and cowardly. They made your grandfather the scapegoat. The disgrace killed him. The men who spoke today knew him and knew why Congress did what it did. I think the whole affair is too complicated and political for you to understand now. I hope someday you will read about it for yourself."

I did read about it later — in various brief histories of the time, short articles in encyclopedias and the like, and found most of them merely repeated the Congressional report of censure on Oakes Ames, either without comment, or tacitly accepting it as justified; and I began to wonder, with a sense of shame, if my father's love had not made him naturally too

prejudiced in my grandfather's favor, and fear that perhaps Oakes Ames had really been guilty of an unjustifiable act. Indeed this fear lay in my mind when, for the purpose of writing this book, I began to read and understand the first-hand evidence in the case — the political situation at the time, the newspapers of the day, the actual word to word testimony before the congressional investigating committee, and the writers on the subject who had not merely repeated the congressional condemnation but had independently investigated the whole affair after the heat of popular excitement was over. And I am now as convinced as my father was, that Oakes Ames was wholly innocent of any intentional wrongdoing and was sacrificed in a time of political excitement, as a scapegoat to allay popular clamor.

I am conscious that my interpretation of the facts may be considered prejudiced. I am Oakes Ames's grandson, proud of his achievements and good name, and anxious to vindicate his honor. I can only say that I have tried to relate the facts as honestly as I can, and without color or bias — and further that I have found no writer who has investigated the Credit Mobilier case for himself and from first-hand sources who is not equally convinced of the injustice done Oakes Ames, or at the very least does not regard the vote of censure upon him as not wholly just.

. . . . . .

[The remainder of the book was not written. — L. A.]

APPENDIX

TREE OF THE AMES FAMILY OF NORTH EASTON, MASSACHUSETTS, 1560–1937

This Tree spans nearly four hundred years. For the first ten generations the trunk shows only the direct father to son descent leading to the Easton branch of the family. Otherwise it would resemble not a tree but a forest. All known offspring of these early ancestors are, however, included in the Genealogy which follows.

The Tree is complete only for the Easton branch, and then only during the Eleventh, Twelfth and Thirteenth Generations — that is, beginning with the children of Oakes and Oliver Ames, the two sons of Oliver Ames senior who remained in Easton after their father settled there.

It ends with the Thirteenth Generation, not because it is dying at the top but because it is so currently alive that it would require constant revision to include new sprouts. But all children of the Fourteenth Generation born before May 1, 1937, are listed in the Genealogy.

The numbers at the ends of the branches refer to the same individuals in the Genealogy. The system of numbering, which begins with the senior branch and follows it through before taking up the next eldest branch, has been adopted to keep family groups together.

THE AMES–ANGIER TREE

This collateral Tree shows the family descent from another Ames ancestor through the female line till it joins the other Tree with the marriage of Susanna Angier to Oliver Ames senior in 1803.

The first known ancestors of both lines, John Ames of Bruton, England, and William Ames of Ipswich, England, were undoubtedly kinsmen, but how closely related is unknown.

The "Tree" was designed by W. A. and the Appendix arranged by him.

GENEALOGY OF THE AMES FAMILY OF NORTH EASTON, MASSACHUSETTS

(In this Genealogy all occupations except chief activities have necessarily been omitted, and the term 'trustee' has been used to include positions of general financial management, directorships, presidencies of corporations, banks, etc., and often covers a large number of such offices.)

(1) JOHN AMES. All that is known of this earliest ancestor from whom the Ames family of Easton can trace direct descent is that he was buried in Bruton, Somersetshire, England, Feb. 21, 1560, and that he had at least one son.

Issue

i. *John Ames* (see 2).

(2) JOHN AMES, son of John Ames (1). Born, Bruton, England; died there in 1583. Married, Sept. 25, 1559, Margery Crome (or Brome).

Issue (All born in Bruton, England)

i. *John Ames* (see 3).
ii. Launcelot Ames, born about 1562.
iii. William Ames, born about 1564.

(3) JOHN AMES, eldest son of John Ames (2). Christened, Bruton, England, May 1, 1560; died there in 1629. Married, Oct. 12, 1601, Cyprian (or Xpian) Browne.

(*Note:* In Mitchell's 'History of Bridgewater' (1840), which contained the first American account of the family, this John Ames of Bruton is called Richard — an error copied in several subsequent records.)

Issue (All born in Bruton, England)

i. Thomas Ames, died in infancy.
ii. Henry Ames, christened July 25, 1603.
iii. *William Ames* (see 4).
iv. *John Ames* (see 4A).
v. Mary Ames, christened Apr. 1, 1613.

(4) WILLIAM AMES, third son of John Ames (3). Founder of the family in America. Christened, Bruton, England, Oct. 6, 1605; died, Old Braintree, Mass., Jan. 11, 1654. Emigrated, probably in 1635, and settled in Old Braintree (now Quincy) in Massachusetts Bay Colony. Worker in iron, farmer. Married Hannah —— about 1639–40.

Issue (All born in Braintree, Mass.)

i. Hannah Ames, born May 12, 1641.
ii. Rebecca Ames, born Oct. —— 1642.
iii. Lydia Ames, born June 2, 1645.
iv. *John Ames* (see 5).
v. Sarah Ames, born Mar. 1, 1650.
vi. Deliverance Ames, born Feb. 6, 1653.

(4A) JOHN AMES, fourth son of John Ames (3). Christened, Bruton, England, Dec. 2, 1610; died, West Bridgewater, Mass., about 1698. Emigrated 1635 to Duxbury in Plymouth Colony, Mass. Farmer. An original shareholder in the "Bridgewater Purchase" of land from the Indians in 1649. Married, Oct. 20, 1645, Elizabeth Hayward of Duxbury, Mass. No issue.

[*Although the above John Ames did not carry on the line he is important in the record because he bequeathed his lands to his nephew, John Ames (5), and so caused the removal of the family to Bridgewater where they lived for five generations.*]

(5) JOHN AMES, only son of William Ames (4). Born, Braintree, Mass., May 24, 1647; died, West Bridgewater,

Mass., Mar. 1, 1726. Farmer. Married, about 1671, Sarah Willis, daughter of Deacon John Willis of Bridgewater, Mass.

Issue (All born in West Bridgewater, Mass.)

i. John Ames, born Apr. 14, 1672.
ii. William Ames, born Nov. 6, 1673.
iii. Nathaniel Ames, born Oct. 9, 1677.

[*The above Captain Nathaniel Ames, iron-master, astronomer, soldier, was the progenitor of what is known as the "Fisher Ames Branch" of the family. His son, Nathaniel Ames 2d (born 1708), physician and almanac-maker, removed to Dedham, Mass., where he married Deborah Fisher. Two of Nathaniel 2d's sons, Dr. Nathaniel Ames 3d (born 1741) and Hon. Fisher Ames (born 1758) were distinguished during and after the Revolutionary War, the former as almanac-maker, legislator and political writer; the latter as lawyer, orator and member of the first U.S. Congress.*]

iv. Elizabeth Ames, born Sept. 6, 1680.
v. *Thomas Ames* (see 6).
vi. Sarah Ames, born Oct. 12, 1685.
vii. David Ames, born Aug. 30, 1688.
viii. Hannah Ames, born 1691 or 1692.

(6) CAPTAIN THOMAS AMES, fourth son of John Ames (5). Born, West Bridgewater, Mass., Feb. 21, 1682; died there Feb. 3, 1737. Blacksmith, soldier, representative to the Massachusetts General Court, 1725. Married, Feb. 27, 1706, Mary Hayward, daughter of Deacon Joseph Hayward of Bridgewater, Mass.

Issue (All born in West Bridgewater, Mass.)

i. *Thomas Ames* (see 7).
ii. Solomon Ames, born Jan. 16, 1709.
iii. Joseph Ames, born May 6, 1711.
iv. Ebenezer Ames, born Apr. 15, 1715.
v. Mary Ames, born June 20, 1717.
vi. Susanna Ames, born May 4, 1720.
vii. Nathan Ames, born July 4, 1722.

viii. Sarah Ames, born Dec. 31, 1724.
ix. Betty Ames, born Dec. 15, 1727.

(7) THOMAS AMES, eldest son of Captain Thomas Ames (6). Born, West Bridgewater, Mass., Feb. 6, 1707; died there Nov. 27, 1774. Blacksmith. Married, June 20, 1731, Keziah Howard, daughter of Major Jonathan Howard of Bridgewater, Mass.

Issue (All born in West Bridgewater, Mass.)

i. Keziah Ames, born Feb. 12, 1732.
ii. Susanna Ames, born Feb. 26, 1734.
iii. Thomas Ames, born Mar. 24, 1736.
iv. *John Ames* (see 8).
v. Mehitabel Ames, born Aug. 10, 1740.
vi. Silvanus Ames, born Jan. 20, 1744.

(8) CAPTAIN JOHN AMES, second son of Thomas Ames (7). Born, West Bridgewater, Mass., Apr. 7, 1738; died there July 17, 1805. Worker in iron. Maker, before the Revolutionary War, of the first Ames shovels. Married, July 12, 1759, Susannah Howard, daughter of Ephraim Howard of Bridgewater, Mass.

Issue (All born in West Bridgewater, Mass.)

i. David Ames, born Feb. 2, 1760.

[*The above David Ames removed from Bridgewater to Springfield, Mass., where he practiced the trade of gunsmith. He was commissioned by President Washington as Superintendent of the U.S. Armory there, and continued in this post until 1802.*]

ii. Keziah Ames
iii. Abigail Ames
iv. Susannah Ames
} triplets, born May 1, 1762.

v. Keziah Ames 2d, born Aug. 21, 1764.
vi. Huldah Ames, born Dec. 28, 1766.
vii. Abigail Ames 2d, born Apr. 12, 1769.
viii. Cynthia Ames, born Oct. 22, 1771.
ix. John Ames, born Feb. 25, 1775.
x. *Oliver Ames* (see 9).

(9) OLIVER AMES, youngest son of Captain John Ames (8). Born, West Bridgewater, Mass., Apr. 11, 1779. Died, North Easton, Mass., Sept. 11, 1863. Removed from West Bridgewater to Easton and founded the Ames Shovel Works there in 1803. Member of Mass. Legislature 1828–29, 1833–34 and 1845. Married, Apr. 7, 1803, Susanna Angier, daughter of Oakes Angier of West Bridgewater, Mass., thus uniting two branches of the family (see Ames-Angier Tree).

Issue

i. *Oakes Ames* (see 10).

ii. Horatio Ames. Born, North Easton, Mass., Nov. 18, 1805; died, Salisbury, Conn., Jan. 28, 1871. Iron master, gun-founder. Married (1st) May 25, 1828, Sarah Hewes Gilmore of Easton, Mass.; (2d) Jan. 11, 1854, Charlotte G. Langdon of Portsmouth, N.H.

Issue (by first wife)

i. Susan Angier Ames, born July 9, 1829.
ii. Horatio Ames, born Apr. 14, 1831.
iii. Gustavus Ames, born July 27, 1833.

iii. *Oliver Ames* (see 31).

iv. Angier Ames. Born, Plymouth, Mass., Feb. 19, 1810; died in infancy.

v. William Leonard Ames. Born, Plymouth, Mass., July 9, 1812; died, St. Paul, Minn., Feb. 8, 1873. Agriculturalist and dealer in land. Married (1st) Emily Louisa Brown of Newark, N.J.; (2d) Amelia Hall of Newton, N.J.; (3rd) Annie Hines of St. Paul, Minn.

Issue (by second wife)

i. William Leonard Ames, born Jan. 10, 1846.
ii. Angier Ames, born Mar. 11, 1847.
iii. Oliver Ames, born Sept. 24, 1850.
iv. John Hall Ames, born Jan. 6, 1853.
v. Amelia Hall Ames, born July 30, 1856.
vi. Fisher Ames, born Sept. 2, 1857.
vii. Herbert Ames, born July 9, 1862.

Issue (by third wife)

viii. Oakes Ames, born May 16, 1870.

vi. Sarah Angier Ames. Born, North Easton, Mass., Sept. 9, 1814; died, Boston, Mass., June 5, 1886. Married, Oct. 19, 1836, Nathaniel Witherell of South Bridgewater, Mass.

Issue

i. George Oliver Witherell, born Oct. 7,1837.
ii. Sarah Emily Witherell, born Feb. 10, 1840.
iii. Channing Witherell, born May 9, 1847.

vii. John Ames. Born, North Easton, Mass., Apr. 18, 1817; died, New York City, May 14, 1844. U.S. Postmaster. Unmarried.

viii. Harriet Ames. Born, North Easton, Mass., Sept. 12, 1819; died, Boston, Mass., Dec. 29, 1896. Married, Mar. 31, 1840, Asa Mitchell of East Bridgewater, Mass.

Issue

i. Frank Ames Mitchell, born June 27, 1841.
ii. John Ames Mitchell, born Jan. 17, 1845.
iii. Anna Mitchell, born June 10, 1847.

(10) OAKES AMES, eldest son of Oliver Ames (9). Born, North Easton, Mass., Jan. 10, 1804; died there May 8, 1873. Copartner Oliver Ames & Sons, financier, member of Congress 1862 to 1873. Married, Nov. 29, 1827, Evelina Orville Gilmore, daughter of Joshua Gilmore of Easton, Mass.

Issue (All born in North Easton, Mass.)

i. Oakes Angier Ames (see 11).
ii. Oliver Ames (see 16).
iii. Frank Morton Ames (see 23).
iv. Henry Gilmore Ames, born Apr. 14, 1839; died in infancy.
v. Susan Eveline Ames (see 30).

(11) OAKES ANGIER AMES, eldest son of Oakes Ames (10). Born, North Easton, Mass., Apr. 15, 1829; died there Sept. 19, 1899. President Oliver Ames & Sons

Corp. and Ames Shovel & Tool Co.; trustee. Married, July 19, 1855, Catherine Hobart, daughter of Judge Aaron Hobart M.C. of East Bridgewater, Mass.

Issue (All born in North Easton, Mass.)

i. Maria Hobart Ames (see 12).
ii. Oakes Ames, born May 8, 1858; died in infancy.
iii. Oakes Angier Ames, born Jan. 21, 1861; died in infancy.
iv. Hobart Ames (see 13).
v. Winthrop Ames (see 14).
vi. Katharine Hobart Ames (see 15).

(12) MARIA HOBART AMES, eldest daughter of Oakes Angier Ames (11). Born, North Easton, Mass., Oct. 13, 1856; died, Cambridge, Mass., Mar. 13, 1918. Married, Sept. 12, 1888, Richard Hickman Harte, M.D., of Philadelphia, Pa.

Issue

i. Katharine Harte (see 12A).
ii. Richard Harte (see 12B).
iii. Helen Harte (see 12C).

(12A) KATHARINE HARTE, eldest daughter of Maria Hobart Ames (12) and Richard H. Harte. Born, Philadelphia, Pa., Oct. 13, 1891. Married, June 19, 1915, George Putnam of Manchester, Mass.

Issue

i. Barbara Putnam, born July 8, 1917.
ii. Katharine Putnam, born June 29, 1919.
iii. Elizabeth Lowell Putnam, born June 30, 1920.
iv. George Putnam, born Aug. 30, 1926.
v. Helen Harte Putnam, born June 23, 1931.

(12B) RICHARD HARTE, only son of Maria Hobart Ames (12) and Richard H. Harte. Born, Philadelphia, Pa.,

Feb. 1, 1894. A.B. Harvard, 1917. President Ames-Baldwin-Wyoming Co. Married, Aug. 16, 1917, Mabel Webster, daughter of Edwin Sibly Webster of Chestnut Hill, Mass.

Issue

i. Jane Harte, born Nov. 22, 1918.
ii. Richard Harte, born June 28, 1921.
iii. Nancy Harte, born Jan. 8, 1927.
iv. Oliver Ames Harte, born May 7, 1929.

(12C) HELEN HARTE, second daughter of Maria Hobart Ames (12) and Richard H. Harte. Born, Jamestown, R.I., Aug. 31, 1899. Married, Oct. 14, 1920, Rodman Ellison Thompson of Haverford, Pa.

Issue

i. Maria Ames Thompson, born Oct. 2, 1921.
ii. Rodman Ellison Thompson, born June 10, 1924.
iii. Paul Thompson, born June 29, 1926.
iv. Richard Harte Thompson, born Oct. 5, 1930.

(13) HOBART AMES, third son of Oakes Angier Ames (11). Born, North Easton, Mass., Aug. 21, 1865. President Oliver Ames & Sons Corp. and Ames Shovel & Tool Co.; trustee. Married, June 18, 1890, Julia Hills Colony, daughter of John Edward Colony of Keene, N.H. No issue.

(14) WINTHROP AMES, fourth son of Oakes Angier Ames (11). Born, North Easton, Mass., Nov. 25, 1870. A.B. Harvard, 1895. Theatrical producer. Married, Sept. 28, 1911, Lucy Fuller, daughter of Frederick Timothy Fuller of Walpole, Mass.

Issue

i. Catherine Hobart Ames (see 14A).
ii. Joan Ames (see 14B).

(14A) CATHERINE HOBART AMES, eldest daughter of Winthrop Ames (14). Born, North Easton, Mass., Aug. 15, 1919.

(14B) JOAN AMES, second daughter of Winthrop Ames (14). Born, North Easton, Mass., July 14, 1923.

(15) KATHARINE HOBART AMES, second daughter of Oakes Angier Ames (11). Born, North Easton, Mass., Jan. 11, 1874. Married, Oct. 10, 1900, Philip Leffingwell Spalding of Philadelphia, Pa.

Issue

i. Philip Spalding (see 15A).
ii. Oakes Ames Spalding (see 15B).
iii. Hobart Ames Spalding (see 15C).

(15A) PHILIP SPALDING, eldest son of Katharine Hobart Ames (15) and Philip L. Spalding. Born, Strafford, Pa., July 7, 1902. A.B. Harvard, 1925. Broker. Married, Oct. 6, 1936, Emily Augusta Thomas, daughter of Seth Edward Thomas, Jr., of Morristown, N.J.

(15B) OAKES AMES SPALDING, second son of Katharine Hobart Ames (15) and Philip L. Spalding. Born, Strafford, Pa., July 30, 1904. Insurance broker. Married, June 7, 1930, Dorothy Goodrich, daughter of Charles Augustus Goodrich, M.D., of Hartford, Conn.

Issue

i. Oakes Ames Spalding, born Oct. 13, 1931.
ii. Marka Spalding, born Mar. 8, 1935.

(15C) HOBART AMES SPALDING, youngest son of Katharine Hobart Ames (15) and Philip L. Spalding. Born, Villanova, Pa., June 24, 1911. A.B. Harvard, 1934. Married

Alice Evelyn Burr, daughter of Isaac Tucker Burr, Jr., of Needham, Mass.

Issue

i. Katharine Ames Spalding, born Jan. 16, 1935.
ii. Hobart Ames Spalding, born Nov. 22, 1936.

(16) OLIVER AMES, second son of Oakes Ames (10). Born, North Easton, Mass., Feb. 4, 1831; died there Oct. 22, 1895. Member Massachusetts Legislature 1880–81; Lieutenant-Governor of Massachusetts 1882–1885 and Governor 1886–88; trustee; financier. L.L.D. (Hon.) Brown University 1892. Married, Mar. 14, 1860, Anna Coffin Ray, daughter of Obed S. Ray, and adopted daughter of William Hadwen of Nantucket, Mass.

Issue

i. William Hadwen Ames (see 17).
ii. Evelina Orville Ames (see 18).
iii. Anna Lee Ames (see 19).
iv. Susan Evelyn Ames (see 20).
v. Lilian Ames (see 21).
vi. Oakes Ames (see 22).

(17) WILLIAM HADWEN AMES, eldest son of Oliver Ames (16). Born, North Easton, Mass., Mar. 1, 1861; died, Boston, Mass., Mar. 26, 1918. Secretary Ames Shovel & Tool Co.; president American Pneumatic Service Co., trustee. Member Massachusetts Legislature 1905–06. Married (1st), Dec. 1, 1891, Mary Elizabeth Hodges, daughter of Chad Hodges of Boston, Mass.; (2d) Oct. 11, 1916, Fanny Elizabeth Holt, daughter of Ira Wright Holt of Arlington, Mass. No issue.

(18) EVELINA (EVELYN) ORVILLE AMES, eldest daughter of Oliver Ames (16). Born, North Easton, Mass.,

Apr. 4, 1863. Married, June 23, 1909, Frederick Garrison Hall of Boston, Mass. No issue.

(19) ANNA LEE AMES, second daughter of Oliver Ames (16). Born, North Easton, Mass., Sept. 6, 1864; died, Manchester, Mass., July 10, 1934. Married, Jan. 27, 1891, George Manning Nowell of Boston, Mass.

Issue

i. Ames Nowell (see 19A).

(19A) AMES NOWELL, only son of Anna Lee Ames (19) and George Manning Nowell. Born, Newton, Mass., Dec. 30, 1892. Certified public accountant. Married, Mar. 7, 1916, (1st) Margaret Anna Laura Harrison, daughter of Lawrence Alexander Harrison of London, Eng.; (2d) Aug. 23, 1934, Iris Olive Calder, daughter of Robert James Calder of Brisbane, Australia.

Issue

i. Lawrence Ames Nowell (by first marriage), born Apr. 28, 1917.

(20) SUSAN EVELYN AMES, third daughter of Oliver Ames (16). Born, North Easton, Mass., Sept. 17, 1867. Married, Dec. 4, 1901, Thomas Taylor of Columbia, S.C.

Issue

i. Thomas Taylor (see 20A).
ii. Anna Ray Taylor (see 20B).

(20A) THOMAS TAYLOR, only son of Susan Evelyn Ames (20) and Thomas Taylor. Born, Boston, Mass., Apr. 26, 1903. Trustee. Married, Oct. 31, 1936, Charlotte Grosvenor Valentine, daughter of Robert Grosvenor Valentine of Washington, D.C.

(20B) ANNA RAY TAYLOR, only daughter of Susan Evelyn Ames (20) and Thomas Taylor. Born, Boston, Mass., June 5, 1905. Married, Nov. 16, 1927, James Henry Fair of Columbia, S.C.

Issue

i. James Henry Fair, born Aug. 23, 1930.
ii. Susan Ames Fair, born Jan. 14, 1933.

(21) LILIAN AMES, fourth daughter of Oliver Ames (16). Born, North Easton, Mass., Feb. 4, 1870; died, Brookline, Mass., May 5, 1925. Married, Apr. 25, 1893, Harry Lorenzo Chatman of Boston, Mass.

Issue

i. Lilian Ames Chatman (see 21A).
ii. Harry Chatman (see 21B).
iii. Anna Ray Chatman (see 21C).

(21A) LILIAN AMES CHATMAN, eldest daughter of Lilian Ames (21) and Harry Lorenzo Chatman. Born, Boston, Mass., Dec. 30, 1894. Married (1st), Dec. 3, 1914, Clarence Aaron Robbins of Brooklyn, N.Y.; (2d), May 3, 1925, Leonard Charles Zaiss of New York City.

(21B) HARRY CHATMAN, only son of Lilian Ames (21) and Harry Lorenzo Chatman. Born, Beverly, Mass., Aug. 21, 1896. Married (1st), Feb. 21, 1920, Marie d'Hunieres Centlivre, daughter of Louis Alphonse Centlivre of Fort Wayne, Ind.; (2d), Aug. 24, 1922, Helen Harrison Jackson, daughter of Judge William H. Jackson of New York City; (3d), Apr. 7, 1931, Josephine Marie Connolly, daughter of James Connolly of Pelham Bay, N.Y.

(21C) ANNA RAY CHATMAN, second daughter of Lilian Ames (21) and Harry Lorenzo Chatman. Born,

Boston, Mass., Feb. 4, 1900. Married (1st), Feb. 23, 1923, Radu Belian of Boston, Mass.; (2d), June 25, 1929, Americo Amodeo of Avellino, Italy.

(22) OAKES AMES, second son of Oliver Ames (16). Born, North Easton, Mass., Sept. 26, 1874. A.B. Harvard, 1898, M.A. 1899. Professor of Botany Harvard University, director Harvard Arnold Aboretum, author 'Orchidaceæ.' Married, May 15, 1900, Blanche Ames, daughter of General Adelbert Ames of Lowell, Mass.

[*The Ames name was, in old records, sometimes written Eames, and Blanche Ames is descended from Captain Anthony Eames who came to America in 1634. His sons spelled their name Ames; but whether there was any connection between Anthony Eames and the ancestors of the Ames family of Easton cannot be determined.*]

Issue

i. Pauline Ames (see 22A).
ii. Oliver Ames (see 22B).
iii. Amyas Ames (see 22C).
iv. Evelyn Ames (see 22D).

(22A) PAULINE AMES, eldest daughter of Oakes Ames (22). Born, North Easton, Mass., Oct. 22, 1901. Married, June 6, 1926, Francis Taylor Pearsons Plimpton of New York City.

Issue

i. George Ames Plimpton, born Mar. 18, 1927.
ii. Francis Taylor Pearsons Plimpton, born Mar. 9, 1928.
iii. Oakes Ames Plimpton, born Jan. 16, 1933.
iv. Sarah Gay Plimpton, born Oct. 4, 1936.

(22B) OLIVER AMES, eldest son of Oakes Ames (22). Born, North Easton, Mass., May 20, 1903. A.B. Harvard, 1927. Trustee, manufacturer.

(22C) AMYAS AMES, second son of Oakes Ames (22). Born, Sharon (North Easton), Mass., June 15, 1906. A.B. Harvard, 1928, M.B.A. Harvard, 1930. Investment banker. Married, June 14, 1930, Evelyn Ingeborg Perkins, daughter of Henry Augustus Perkins of Hartford, Conn.

Issue

i. Oakes Ames, born Oct. 9, 1931.
ii. Edward Amyas Ames, born Oct. 28, 1933.
iii. Olivia Ames, born Mar. 14, 1937.

(22D) EVELYN AMES, second daughter of Oakes Ames (22). Born, Sharon (North Easton), Mass., Jan. 9, 1910. Married, July 1, 1933, John Paschall Davis of New York City.

Issue

i. Blanche Ames Davis, born Aug. 10, 1934.
ii. John Paschall Davis, born Oct. 9, 1936.

(23) FRANK MORTON AMES, third son of Oakes Ames (10). Born, North Easton, Mass., Aug. 14, 1833; died, Boston, Mass., Aug. 23, 1898. President Kingsley Iron & Machine Co. of Canton, Mass.; member Massachusetts Legislature 1869, 1882–84. Married, Nov. 13, 1856, Catherine Hayward Copeland, daughter of Hiram Copeland of Easton, Mass.

Issue

i. Frank Angier Ames (see 24).
ii. Alice Lurana Ames (see 25).
iii. Charles Oakes Ames, born May 24, 1861; died in infancy.
iv. Oakes Ames (see 26).
v. Anna Copeland Ames (see 27).
vi. Katie Eveline Ames (see 28).
vii. Harriett Elizabeth Ames (see 29).

(24) FRANK ANGIER AMES, eldest son of Frank Morton Ames (23). Born, North Easton, Mass., July 11, 1858; died, Boston, Mass., Nov. 5, 1918. Manager Ames Southside Plantation, Louisiana. Unmarried.

(25) ALICE LURANA AMES, eldest daughter of Frank Morton Ames (23). Born, Canton, Mass., Dec. 31, 1859; died, Plymouth, Mass., May 10, 1934. Married (1st), Apr. 20, 1887, Edward Crosby Morris of Boston, Mass.; (2d), Nov. 28, 1900, George Frederick Chapman of Evanston, Wyoming.

Issue

i. Anna Ames Chapman, born July 24, 1903; died in infancy.

(26) OAKES AMES, third son of Frank Morton Ames (23). Born, Canton, Mass., Feb. 24, 1863; died, Milton, Mass., Feb. 23, 1914. President Lamson Co.; vice-president Pneumatic Service Co. Married, Oct. 28, 1886, Florence Ingalls, daughter of Joshua Shepherd Ingalls of St. Johnsbury, Vermont.

Issue

i. Amelia Catherine Ames (see 26A).
ii. Oakes Ingalls Ames (see 26B).
iii. Charles Edgar Ames (see 26C).

(26A) AMELIA CATHERINE AMES, only daughter of Oakes Ames (26). Born, Boston, Mass., Mar. 20, 1889. Married, July 23, 1918, Carlyle Forrest Nicol of Summit, N.J.

Issue

i. Carlyle Forrest Nicol, born Apr. 23, 1919.
ii. Nancy Ames Nicol, born Sept. 12, 1921.

(26B) OAKES INGALLS AMES, eldest son of Oakes Ames (26). Born, Boston, Mass., Jan. 14, 1893. A.B. Harvard, 1915. President Mt. Auburn Cemetery. Married, Sept. 22, 1923, Harriet Hastings Hatch, daughter of George Stanley Hatch of Medford, Mass.

Issue

i. Oakes Ames, born Sept. 21, 1926.
ii. George Stanley Ames, born Nov. 3, 1929.

(26C) CHARLES EDGAR AMES, second son of Oakes Ames (26). Born, Boston, Mass., May 3, 1895. A.B. Harvard, 1917. Investment banker. Married, May 10, 1926, Eleanor Erving King, daughter of James Gore King of New York City.

Issue

i. Charles Oakes Ames, born Oct. 28, 1926.
ii. Cornelia King Ames, born May 11, 1928.
iii. Eleanor Erving Ames, born May 4, 1931.

(27) ANNA COPELAND AMES, second daughter of Frank Morton Ames (23). Born, Canton, Mass., Dec. 5, 1870; died, Dedham, Mass., Jan. 25, 1908. Married, Sept. 30, 1902, George Edward Hall of New York City.

Issue

i. Catherine Ames Hall (see 27A).
ii. Alice Ames Hall (see 27B).

(27A) CATHERINE AMES HALL, eldest daughter of Anna Copeland Ames (27) and George Edward Hall. Born, New York City, May 24, 1904. Married, Sept. 10, 1932, Lothrop Hooper Wakefield of Dedham, Mass.

Issue

i. Catherine Hall Wakefield, born Jan. 14, 1934.
ii. Lothrop Hooper Wakefield, born Nov. 16, 1935.

(27B) ALICE AMES HALL, second daughter of Anna Copeland Ames (27) and George Edward Hall. Born, Watertown, N.Y., Sept. 6, 1906. Married, Oct. 27, 1933, William Lambert Williams of Dedham, Mass.

Issue

i. William Lambert Williams, born Sept. 15, 1934.
ii. Alice Chapman Williams, born Nov. 3, 1936.

(28) KATIE EVELINE (EVELYN) AMES, third daughter of Frank Morton Ames (23). Born, Canton, Mass., May 27, 1872. Married, June 12, 1897, Frederick Page Royce of Boston, Mass.

Issue

i. Catherine Ames Royce (see 28A).
ii. Mary Royce (see 28B).
iii. Frank Ames Royce (see 28C).
iv. Harriet Elizabeth Royce (see 28D).
v. Evelyn Ames Royce (see 28E).

(28A) CATHERINE AMES ROYCE, eldest daughter of Katie Eveline Ames (28) and Frederick Page Royce. Born, Medford, Mass., June 24, 1898. Married, June 11, 1921, Robert Cushing Hamlen of Boston, Mass.

Issue

i. Frederick Royce Hamlen, born Dec. 17, 1922.
ii. Caroline Frances Hamlen, born Feb. 16, 1925.
iii. Catherine Royce Hamlen, born Nov. 13. 1927.

(28B) MARY ROYCE, second daughter of Katie Eveline Ames (28) and Frederick Page Royce. Born, Medford, Mass., Apr. 13, 1900. Married, June 12, 1920, Roland Morris Baker, Jr. of Boston, Mass.

Issue

i. Evelyn Ames Baker, born May 8, 1921.
ii. Susan Baker, born Dec. 27, 1923.

iii. Mary Royce Baker, born Mar. 6, 1926.
iv. Edith Margaret Baker, born Jan. 19, 1928.

(28C) FRANK AMES ROYCE, only son of Katie Eveline Ames (28) and Frederick Page Royce. Born, Medford, Mass., July 13, 1901. Married, June 20, 1925, Margaret Newlin, daughter of Richard Marshall Newlin of Whitford, Pa.

Issue

i. Margaret Newlin Royce, born July 10, 1926.
ii. Barbara Royce, born Feb. 27, 1929.
iii. Janet Royce, born Sept. 14, 1930.
iv. Edith Harrison Royce, born Jan. 3, 1937.

(28D) HARRIET ELIZABETH ROYCE, third daughter of Katie Eveline Ames (28) and Frederick Page Royce. Born, Dedham, Mass., June 19, 1904. Married, June 16, 1928, Philip Huntington Theopold of Boston, Mass.

Issue

i. Anne Huntington Theopold, born Nov. 27, 1929.
ii. Harriet Royce Theopold, born Sept. 29, 1931.
iii. Jean Ames Theopold, born Dec. 28, 1933.
iv. Karen Theopold, born Dec. 1, 1935. } twins
v. Freda Theopold, born Dec. 1, 1935. }

(28E) EVELYN AMES ROYCE, youngest daughter of Katie Eveline Ames (28) and Frederick Page Royce. Born, Dedham, Mass., Nov. 25, 1907. Married, Oct. 12, 1934, Francis Sherburne Hill of Boston, Mass.

Issue

i. Wendy Ames Hill, born Jan. 8, 1936.

(29) HARRIETT ELIZABETH AMES, fourth daughter of Frank Morton Ames (23). Born, Canton, Mass., Dec. 7,

1873. Married, Jan. 5, 1910, George Edward Hall of Dedham, Mass.

Issue

i. Elizabeth Ames Hall (see 29A).
ii. Jean Ames Hall (see 29B).
iii. George Edward Hall (see 29C).

(29A) ELIZABETH AMES HALL, eldest daughter of Harriett Elizabeth Ames (29) and George Edward Hall. Born, Dedham, Mass., May 17, 1911.

(29B) JEAN AMES HALL, second daughter of Harriett Elizabeth Ames (29) and George Edward Hall. Born, Dedham, Mass., Jan. 9, 1913. Married, Sept. 7, 1935, William Richardson Bascom of St. Louis, Mo.

Issue

i. Calvin Perry Bascom, born July 30, 1936.

(29C) GEORGE EDWARD HALL, only son of Harriett Elizabeth Ames (29) and George Edward Hall. Born, Dedham, Mass., Oct. 1, 1915.

(30) SUSAN EVELINE AMES, only daughter of Oakes Ames (10). Born, North Easton, Mass., May 14, 1842; died there July 20, 1908. Married, Jan. 1, 1861, Henry Waterman French of Pawtucket, R.I. No issue.

(31) OLIVER AMES, third son of Oliver Ames (9). Born, Plymouth, Mass., Nov. 5, 1807. Died, North Easton, Mass., Mar. 9, 1877. Co-partner Oliver Ames & Sons; president Union Pacific Railroad; trustee. Member Massachusetts Legislature 1852 and 1857. Married, June 11, 1833, Sarah

Lothrop, daughter of Hon. Howard Lothrop of Easton, Mass.

Issue

i. Frederick Lothrop Ames (see 32).
ii. Helen Angier Ames (see 38).

(32) FREDERICK LOTHROP AMES, only son of Oliver Ames (31). Born, North Easton, Mass., June 8, 1835; died there Sept. 13, 1893. A.B. Harvard, 1854. Treasurer Oliver Ames & Sons Corp.; trustee; member Massachusetts Legislature 1872; Fellow of Harvard University 1888–93. Married, June 7, 1860, Rebecca Caroline Blair, daughter of James Blair of St. Louis, Mo.

Issue

i. Henry Shreve Ames, died in infancy.
ii. Helen Angier Ames (see 33).
iii. Oliver Ames (see 34).
iv. Mary Shreve Ames (see 35).
v. Frederick Lothrop Ames (see 36).
vi. John Stanley Ames (see 37).

(33) HELEN ANGIER AMES, eldest daughter of Frederick Lothrop Ames (32). Born, North Easton, Mass., July 28, 1862; died, Boston, Mass., Feb. 13, 1907. Married, June 7, 1887, Robert Chamblett Hooper of Boston, Mass.

Issue

i. Helen Hooper (see 33A).

(33A) HELEN HOOPER, only child of Helen Angier Ames (33) and Robert Chamblett Hooper. Born, Boston, Mass., Mar. 5, 1891. Married, Apr. 5, 1911, Lathrop Brown of New York City.

Issue

i. Halla (Helen Hooper) Brown, born Dec. 29, 1911.

ii. Camilla Hooper Brown, born, Jan. 26, 1913. Married, Oct. 14, 1933, Robert Warren Canfield of New York City.

Issue:

i. George Folger Canfield, born Aug. 13, 1935.
ii. Camilla Canfield, born Jan. 29, 1937.

(34) OLIVER AMES, second son of Frederick Lothrop Ames (32). Born, North Easton, Mass., Oct. 21, 1864; died there, June 18, 1929. A.B. Harvard, 1886. Vice-president and treasurer Oliver Ames & Sons Corp.; trustee. Married, Dec. 3, 1890, Élise Alger West, daughter of Preston Carpenter Firth West of Boston, Mass.

Issue

i. Élise Ames (see 34A).
ii. Olivia Ames (see 34B).
iii. Oliver Ames (see 34C).
iv. Richard Ames (see 34D).

(34A) ÉLISE AMES, eldest daughter of Oliver Ames (34). Born, West Manchester, Mass., Aug. 14, 1892. Married, Aug. 17, 1917, William Amory Parker of Bedford, Mass.

Issue

i. Amory Parker, born Aug. 24, 1918.
ii. Oliver Ames Parker, born Aug. 7, 1920.

(34B) OLIVIA AMES, second daughter of Oliver Ames (34). Born, Boston, Mass., Nov. 18, 1893. Married, June 18, 1927, Henry Bromfield Cabot of Brookline, Mass.

Issue

i. Henry Bromfield Cabot, born July 26, 1928.

(34C) OLIVER AMES, eldest son of Oliver Ames (34). Born, Boston, Mass., Apr. 8, 1895. A.B. Harvard, 1917. Lieutenant in the World War; awarded Distinguished Service Cross. Killed in action, Meurcy Farm, Villers-sur-Fère,

France, July 29, 1918. Married, Oct. 6, 1917, Caroline Lee Fessenden, daughter of Sewall Henry Fessenden of Boston, Mass.

Issue

i. Olivia Ames, born July 3, 1918.

(34D) RICHARD AMES, second son of Oliver Ames (34). Born, Prides Crossing, Mass., Aug. 27, 1896; died, Paris, France, Mar. 31, 1935, and buried in the 'Musicians' Corner,' Père Lachaise Cemetery. Served in the World War. Musician. Unmarried.

(35) MARY SHREVE AMES, youngest daughter of Frederick Lothrop Ames (32). Born, North Easton, Mass., Feb. 1, 1867. Married, May 8, 1916, Louis Adams Frothingham M.C. of Boston, Mass. No issue.

(36) FREDERICK LOTHROP AMES, third son of Frederick Lothrop Ames (32). Born, North Easton, Mass., July 23, 1876; died there June 19, 1921. A.B. Harvard, 1898. Trustee; originator 'Langwater' breed of Guernsey cattle. Married, May 31, 1904, Edith Callender Cryder, daughter of Duncan Cryder of New York City.

Issue

i. Frederick Lothrop Ames (see 36A).
ii. Mary Callender Ames (see 36B).

(36A) FREDERICK LOTHROP AMES, only son of Frederick Lothrop Ames (36). Born, North Easton, Mass., May 1, 1905; died Nov. 6, 1932. Aviator. Married, Feb. 25, 1928, Maurice Willard, daughter of Floyd Lee Willard of Albert Lea, Minn.

Issue

i. Sally Blair Ames, born Feb. 15, 1930.

(36B) MARY CALLENDER AMES, only daughter of Frederick Lothrop Ames (36). Born, North Easton, Mass., Sept. 20, 1908. Married, Jan. 18, 1930, Howard Gardiner Cushing of New York City.

Issue

i. Howard Gardiner Cushing, born Sept. 4, 1931.
ii. Frederick Ames Cushing, born Apr. 6, 1934.

(37) JOHN STANLEY AMES, fourth son of Frederick Lothrop Ames (32). Born, North Easton, Mass., Feb. 15, 1878. A.B. Harvard, 1901. M.F. Harvard, 1910. Trustee. Married, Apr. 17, 1909, Anne McKinley Filley, daughter of Oliver Brown Filley of St. Louis, Mo.

Issue

i. John Stanley Ames (see 37A).
ii. David Ames (see 37B).
iii. Rebecca Caroline Ames (see 37C).
iv. Oliver Ames (see 37D).

(37A) JOHN STANLEY AMES, eldest son of John Stanley Ames (37). Born, Boston, Mass., Mar. 26, 1910. A.B. Harvard, 1932. Married, Oct. 12, 1935, Isabel Biddle Henry, daughter of Thomas Charlton Henry of Chestnut Hill, Pa.

Issue

i. John Stanley Ames, born Oct. 18, 1936.

(37B) DAVID AMES, second son of John Stanley Ames (37). Born, North Easton, Mass., Jan. 26, 1912. A.B. Harvard, 1934.

(37C) REBECCA CAROLINE AMES, only daughter of John Stanley Ames (37). Born, North Easton, Mass., Oct. 24, 1916.

(37D) OLIVER AMES, third son of John Stanley Ames (37). Born, Boston, Mass., Dec. 13, 1920.

(38) HELEN ANGIER AMES, only daughter of Oliver Ames (31). Born, North Easton, Mass., Nov. 11, 1836; died there, Dec. 13, 1882. Unmarried.

AMES–ANGIER TREE

(A–A 1) WILLIAM AMES of Ipswich, England. Merchant adventurer. Married Joane Snelling of Ipswich.

Known Issue

i. William Ames (see A–A 2).

(A–A 2) WILLIAM AMES, D.D., son of William Ames (A–A 1). Born, Norwich, England, 1576; died, Rotterdam, Holland, Nov. 1633. Educated at Christ Church College, Cambridge, England, Author; Professor of Divinity in the University of Franeker, Netherlands. Married (second wife) Joane Fletcher, daughter of Giles Fletcher, Ambassador from England to Russia in 1588.

Issue

i. *Ruth Ames* (see A–A 3).
ii. William Ames
iii. John Ames

[*Joane, the widow of William Ames, D.D., came with her three minor children to New England in May 1637, residing first in Salem and later in Cambridge, where she died in Dec. 1644. Her sons, William and John, were educated at Harvard, but afterward returned to England.*]

(A–A 3) RUTH AMES, only daughter of Rev. William Ames, D.D., (A–A 2). Born 1619, probably at Franeker

in the Netherlands; died, Cambridge, Mass., July 3, 1656. Married, July 3, 1644, Edmund Angier of Cambridge, Mass., son of John Angier of Dedham, England.

Issue

i. John Angier, born Aug. 21, 1645; died in infancy.
ii. Ruth Angier, born Sept. 28, 1647.
iii. John Angier, born Apr. 22, 1649; died in infancy.
iv. Ephraim Angier, born 1652.
v. *Samuel Angier* (see A–A 4).
vi. John Angier, born June 2, 1656; died in infancy.

(A–A 4) REV. SAMUEL ANGIER, fourth son of Ruth Ames (A–A 3) and Edmund Angier. Born Mar. 17, 1654; died Jan. 21, 1719. A.B. Harvard, 1673. Married, Sept. 2, 1680, Hannah Oakes, daughter of Rev. Urian Oakes of Cambridge, Mass., fourth President of Harvard College (1679–81).

Issue

i. Ames Angier, born June 29, 1681.
ii. Hannah Angier, born 1682.
iii. Ruth Angier, born 1684; died in infancy.
iv. Edmund Angier, born 1685.
v. Urian Angier.
vi. Oakes Angier.
vii. Samuel Angier.
viii. Dorothy Angier.
ix. Sarah Angier.
x. Eunice Angier, born 1698.
xi. *John Angier* (see A–A 5).
xii. Elizabeth Angier.
xiii. Ruth Angier (2d), born 1705.

(A–A 5) REV. JOHN ANGIER, sixth son of Rev. Samuel Angier (A–A 4). Born July 1, 1701; died, East Bridgewater, Mass., Apr. 14, 1787. A.B. Harvard, 1720. Married, 1733, Mary Bourne, daughter of Ezra Bourne of Sandwich, Mass.

Issue

i. Martha Angier, born 1733.
ii. John Angier, born 1735.
iii. Ezra Angier, born 1738.
iv. Mary Angier, born 1740.
v. Samuel Angier, born 1743.
vi. *Oakes Angier* (see A–A 6).

(A–A 6) OAKES ANGIER, fourth son of Rev. John Angier (A–A 5). Born, East Bridgewater, Mass., Dec. 10, 1745; died, West Bridgewater, Sept. 1, 1786. A.B. Harvard, 1764. Lawyer. Married, 1774, Susannah Howard, daughter of Colonel Edward Howard of Bridgewater, Mass.

Issue

i. Charles Angier, born 1774.
ii. Mary Angier, born 1776.
iii. John Angier, born 1778.
iv. Sarah Angier, born 1780.
v. *Susanna Angier* (see A–A 7).
vi. Oakes Angier, born 1785.

(A–A 7) SUSANNA ANGIER, third daughter of Oakes Angier (A–A 6). Born, West Bridgewater, Mass., Mar. 8, 1783. Died, North Easton, Mass., Mar. 27, 1847. Married, Apr. 7, 1803, in West Bridgewater, Mass., Oliver Ames (9) of the 'Ames Tree,' thus uniting two branches of the family.

For Issue see Oliver Ames (9).

THE AMES COAT OF ARMS

During the reign of Edward I. the Heralds' College in England granted a coat of arms to the descendants of John Amyas of Yorkshire. It is thus described: "Argent, on a Bend sable, three Roses of the field"; which, translated out of the heraldic jargon, means a silver, or white, shield, crossed from upper right to lower left by a broad black band with three silver or white, roses displayed on it. A later version (re-issued to and now used by the family in England) makes the bend "cottised" — that is, flanked by two narrower black bands. The crest is a single silver, or white, rose; and the motto "*Fama Candida Rosa Dulcior*" or (I translate for the benefit of our college graduates), "Fair fame is sweeter than the rose." There is a sort of pun in the word 'candida' which signifies both fair, like the fame, and white, like the rose.

According to rigid heraldic rules a coat of arms may be inherited only by the direct descendants of the original holder. As none of us in America can prove this direct descent we have, strictly speaking, no right to use these arms, although many American families seem to commit such pillage with impunity. But perhaps the Revolution which freed us from the British yoke also freed us from the tyranny of the Heralds' College. In any case, the crest and motto are not an heraldic part of a coat of arms, and may be displayed without apology by any of our tribe who fancies them.

'MAYFLOWER' DESCENTS

The Ames Family of Easton can trace descents, as shown in the following tables, from four 'Mayflower' passengers: Francis Cooke, Mary Chilton, John Alden and Priscilla Mullins.

I

FRANCIS COOKE

His wife Hester followed with their children in the ship *Ann* in 1623. He died in Plymouth 1663. His daughter

JANE COOKE, born probably in Holland. Married, about 1628, Experience Mitchell who was born England 1609, died Bridgewater 1689.

Their daughters

HANNAH MITCHELL, born Duxbury after 1657. Married 1682 Joseph Hayward of Bridgewater who died there after 1718. Their daughter

ELIZABETH MITCHELL, born Bridgewater. Married 1645 John Washburn of Bridgewater. Their daughter

MARY HAYWARD, born Bridgewater 1685. Married 1706 Thomas Ames who was born Bridgewater 1682 and died there 1737. Their son

MARY WASHBURN, born Bridgewater 1661. Married, about 1694, Samuel Kinsley who was born 1662. Their daughter

THOMAS AMES, born Bridgewater 1707 and died there 1774. Married 1731 Keziah Howard who was born Bridgewater 1712. Their son

MARY KINSLEY, born Bridgewater. Married 1716 Thomas Willis who was born Bridgewater 1694 and died there. Their daughter

JOHN AMES, born Bridgewater 1738 and died there 1805. Married

RHODA WILLIS, born Bridgewater 1727. Married 1744 Daniel

1759 Susannah Howard who was born Bridgewater 1736. Their son

OLIVER AMES, born Bridgewater 1779, died North Easton 1863. Married 1803 Susanna Angier who was born Bridgewater 1783. Their sons were

Lothrop who was born Bridgewater 1721 and died there. Their son

DANIEL LOTHROP, born Bridgewater 1745 and died there. Married 1764 Hannah Howard who was born Bridgewater 1746. Their daughter

HANNAH LOTHROP, born Bridgewater 1771. Married 1789 Joshua Gilmore who was born Raynham 1766, died Easton 1836. Their daughter

EVELINA ORVILLE GILMORE, born Easton 1809. Married 1827 Oakes Ames who was born North Easton 1804 and died there 1873. Their sons were

OAKES AMES (1804–1873)
OLIVER AMES 2d (1807–1877)
} of North Easton

OAKES ANGIER AMES (1829–1899)
OLIVER AMES 3d (1831–1895)
FRANK MORTON AMES (1833–1898)
} of North Easton

II

MARY CHILTON

Daughter of James Chilton who died on board the *Mayflower*. Mary, then about twelve years old, is reputed to be the first woman to land from the ship in Plymouth. She died in Boston 1679. She married in Plymouth, 1624, John Winslow who was born in England 1597, and died in Boston 1674. His brother Edward became Governor of Plymouth Colony. Their daughter

SUSANNAH WINSLOW, born Plymouth about 1628. Married 1649 Robert Latham (probably the son of William Latham, another *Mayflower* passenger) who was born in Plymouth about 1625 and died in Bridgewater 1688. Their daughter

SARAH LATHAM, born Bridgewater. Married, about 1684, John Howard of Bridgewater who died there not later than 1727. Their son

EDWARD HOWARD, born Bridgewater 1687 and died there 1770. Married 1711 Mary Byram who was born in Bridgewater 1690. Their son

EDWARD HOWARD, born Bridgewater 1723–4 and died there 1809. Married 1745 Susanna Howard who was born in Bridgewater 1723–4. Their daughter

SUSANNA HOWARD, born Bridgewater 1751. Married 1774 Oakes Angier who was born in Bridgewater 1745 and died there 1786. Their daughter

SUSANNA ANGIER, born Bridgewater 1783. Married 1803 Oliver Ames who was born in Bridgewater 1779 and died in North Easton 1863. Their sons were

OAKES AMES (1804–1873)
OLIVER AMES 2d (1807–1877) } of North Easton

III

JOHN ALDEN AND PRISCILLA MULLINS

John Alden, born England about 1599, died Duxbury 1687. Married Priscilla Mullins about 1623, whose father William Mullins also came in the *Mayflower* and died in Plymouth during the first winter. Their daughter

> RUTH ALDEN, born Duxbury 1636. Married 1657 John Bass who was born in Braintree 1632 and died there 1716. Their daughter
>
> MARY BASS, born Braintree 1669. Married 1686 William Copeland who was born in Braintree 1656 and died there 1716. Their son

JONATHAN COPELAND, born Braintree 1701 and died there 1790. Married 1723–4 Betty Snell who was born in Bridgewater 1705. Their daughter

ABIGAIL COPELAND, born Bridgewater 1724. Married 1745 George Howard who was born in Bridgewater 1722 and died there 1815.

Their daughters

HANNAH HOWARD, born Bridgewater 1746. Married 1764 Daniel Lothrop who was born in Bridgewater 1745 and died in Wilton, Maine, 1837. Their daughter

HANNAH LOTHROP, born Bridgewater 1771. Married 1789 Joshua Gilmore who was born in Raynham 1766, died Easton 1836. Their daughter

EVELINA ORVILLE GILMORE, born Easton 1809. Married 1827 Oakes Ames who was born in North Easton 1804 and died there 1873. Their sons were

OAKES ANGIER AMES (1829–1899)
OLIVER AMES 3d (1831–1895)
FRANK MORTON AMES (1833–1898)
} of North Easton

BETTY HOWARD, born Bridgewater 1751. Married 1774 Edmund Lothrop who was born 1746 and died in Easton 1815. Their son

HOWARD LOTHROP, born Easton 1776 and died there 1857. Married 1805 Sally Williams who was born in Easton 1787. Their daughter

SARAH LOTHROP, born Easton 1812. Married 1833 Oliver Ames 2d who was born in Plymouth 1807, died North Easton 1877. Their son was

FREDERICK LOTHROP AMES (1835–1893) } of North Easton

COLONIAL DAMES OF AMERICA

Female members of the family may qualify for membership in the Colonial Dames of America by tracing descent from Urian Oakes, fourth President of Harvard College, who ranks as an "important Colonial official before 1776." (See page 78.)

DAUGHTERS OF THE AMERICAN REVOLUTION

For membership in the Daughters of the American Revolution descent may be traced from Captain John Ames of Bridgewater (1738–1805).

CHRONOLOGY OF THE AMES SHOVEL WORKS IN NORTH EASTON, MASS. 1774–1935

1773? The exact year is uncertain, but at any rate before 1776 Captain John Ames began the manufacture of shovels on Town River in West Bridgewater, Mass. The site of his forge and his adjoining land are now the West Bridgewater 'War Memorial Park.'

1779 Oliver Ames, youngest son of Captain John Ames and founder of the works in Easton, Mass., was born in West Bridgewater, Mass., April 11.

Revolutionary War, 1775–1783

1803 Oliver Ames came to North Easton and, on August 1, bought for $1,600 a forge, nail-making shop, dwelling house and several pieces of land near the Shovel Shop dam on Pond Street. This dam and the shops had been built in 1792–93 by Eliphalet Leonard 3d; but he failed in 1801, and his properties passed to Abiezer Alger of Bridgewater, from whom Oliver Ames purchased them. He used the forge as a shovel shop and the nailer's shop for making shovel and hoe-handles. (These shops were of wood and were, with the additions to them, almost completely destroyed by fire in 1852.) Oliver Ames lived in the dwelling house, still standing, though altered, at 46 Pond Street, and here his sons Oakes and Horatio were born.

1805 The first recorded date of Oliver Ames's shovel-making in North Easton is April 17,

Jefferson President, 1801–1809

1805, when Ziba Randall charged him one dollar for carting six dozen shovels to Boston. He doubtless made shovels in Easton earlier, probably as early as 1803, but may have taken these to Boston himself.

1805 Captain John Ames died (July 17) in West Bridgewater, and Oliver Ames inherited his forge and land there, and continued to use the forge for shovel-making.

1807 Oliver Ames removed to Plymouth, Mass., and for seven years supervised the shovel-making plant of the Plymouth Iron Works there. Their forges were on Town Brook, above the lowest dam which still exists on Summer Street next the public playground. Oliver Ames also manufactured cotton-spinning machinery and other machines at the Plymouth Works. He lived in the 'Long House' nearby (now numbered 120–122 Summer Street) and here his third son, Oliver, was born. But he meantime continued shovel-making in North Easton and West Bridgewater. In association with Asa Waters he also manufactured hoes in Easton at a shop at the Hoe Shop dam behind Unity Church Cemetery. This wooden shop was leased from Nathan Pratt, a local blacksmith, who had built it and the dam in 1804–05. From there about 800 hoes were sent to Boston during three months in 1808.

Jefferson President, 1801–1809

1813 Oliver Ames bought the land in Easton on which he now began to build his homestead, together with several large adjacent parcels. In this year he also built, with Asa Waters, a factory where the Ames Machine Shop now stands for weaving cotton cloth, and made the machines for it in Plymouth.

War of 1812

1814 Owing to the depression which followed the War of 1812 the Plymouth Iron Works closed, and Oliver Ames returned to North Easton where, in addition to making shovels, he, for one year, continued to manufacture hoes in partnership with Asa Waters under the firm name of Ames, Waters & Co.

1814 Oliver Ames bought the shop at the Hoe Shop dam and the surrounding land, and used the shop for making shovels, discontinuing the manufacture of hoes.

War of 1812

1815 Oliver Ames took Col. David Manley of Easton and others into partnership in his cotton-making enterprise under the name of the 'Easton Manufacturing Company.' This business continued until 1826 when it failed. The Company owned a number of frame buildings, and also built (1816) a general store which stood on North Main Street nearly opposite the present Library.

First tariff, 1816

1817 Oliver Ames made the first back-strapped shovels.

Between 1800 & 1821, 1200 miles of McAdam roads built

1823 Oliver Ames built a dam and shop in South Braintree, Mass., as an adjunct to his North Easton plant. [*Oakes 19, Oliver 16*]

1825 Oliver Ames, together with the owners of other water powers on the Queset River, raised and enlarged the Long Pond dam to conserve more water. A smaller dam had been built there in 1763 by Stoughton farmers to flow the meadows above. Shortly after the dam was enlarged (in 1826) he built a wooden shop there.

1826 Oliver Ames built a stone shop, 40 feet long and 26 feet wide, as part of the main plant at the Shovel Shop Pond dam.

1828 Oliver Ames built a stone shop at the Hoe

Shop dam to replace the former wooden one. [*Oliver Senior in Mass. House 1828–29 and again in 1833*]

First railroad line built

1837 Oliver Ames reported to the State that during this year he manufactured in Easton shovels valued at $108,000, employing 84 workmen.

Panic of 1837

By 1840, 3000 miles of railroad built

"Times very dull," 1842

1844 Oliver Ames, now sixty-five years old, turned the active management of his business over to his sons, Oakes Ames and Oliver Ames, giving each a one-third interest and retaining the remaining third himself. The firm, previously known merely as 'O. Ames,' now became a partnership as 'Oliver Ames & Sons.' [*Oakes Ames was 40; Oliver, 37*]

First telegraph line opened, 1843

1844–45 The dam at Flyaway Pond was built by the Company to conserve the water supply.

1845 Oliver Ames & Sons reported to the State that during this year they made shovels valued at $136,000 and employed 72 hands in their Easton shops. [*Oliver State Senator in 1845*]

1847 The company built a small brick office or "Counting House" on Main Street, replaced by a larger one in 1863.

1847 The Company replaced its old store on Main Street, opposite the present Library, with a larger one, 60 by 35 feet.

Mexican War, 1846–1847

1847 The firm bought a water privilege on Bolivar Street in Canton, Mass., enlarged the dam and built a stone shop there as another adjunct to their Easton plant.

Gold discovered in California, 1848

1849 A large wooden barn to house the horses and oxen owned by the Company was built on the same foundations as the present Ames-Baldwin-Wyoming office on North Main Street; and a Carriage House was built north of it, near the corner of Oliver Street, for the

Gold rush, 1849

partners' private horses and carriages. This was originally called the 'Chaise House.'

1850 Irish immigrants began to replace Americans in the shops as the less-skilled workmen, the Americans remaining as foremen.

In 1850, 9000 miles of railroad

1851 Repaired the Long Pond dam with heavy stone construction.

Gold discovered in Australia, 1851

1851 The Company bought the 'Red Factory,' a red-painted wooden shop with water power, where cut-nails, tacks, and, for a time, knitting-cotton had been made by previous owners. It stood on the south side of Main Street nearly opposite the end of Stone's Pond. It was torn down in 1894. The dam to furnish power for this shop dates from about 1720, and is the oldest dam in North Easton.

1852 (March 2) Fire destroyed the wooden shops grouped near the Shovel Shop Pond dam in which most of the manufacturing had heretofore been done. A thousand dozen of finished shovels stored there were also destroyed. Carpenters were brought from nearby towns and in less than three weeks temporary shops were built and work resumed. These wooden shops were so constructed that they might later be divided into dwellings, and some of the houses made from them still stand on Oliver Street and on the 'Island.' The building of new, permanent stone shops was now begun, most of the stone coming from a quarry opened behind the present Oliver Ames High School. The stone for the previously built stone shops had been brought from Quincy.

1852 The Long Shop (530 feet long) was built, and the first steam-engine (60 horse power) in the works was installed in it. Before this water-wheels furnished the sole motive power.

The only other steam-engine in town had been set up eight years before at the Morse factory in South Easton.

1853 Built a new and larger carriage house and stable on the site of the old one.

1853 Trip-hammer Shop built, and a second steam-engine installed there.

1855 The Company reported to the State that they manufactured shovels valued at $600,000 in Easton during this year and employed 330 workmen.

1855 A private Railroad Line (opened May 16) for the shipment of their shovels was built by the Company from North Easton to Stoughton where it connected with the Boston & Providence Railroad. Previously shovels had been carted by four or six-horse teams either to Stoughton or to the steamboats for New York at Fall River and Providence. The Company's line also carried passengers.

1856–57 Machine Shop built.

Panic of 1857

1863 A new and larger brick Office on Main Street (now occupied by the First National Bank) built on the site of the previous smaller one.

John Brown's raid on Harper's Ferry, 1859

Civil War, 1861

1863 Oliver Ames, senior, died in his 85th year. His one-third interest in the firm was divided between his grandsons, Oakes Angier Ames, Oliver Ames and Frederick Lothrop Ames, who were taken into the partnership. His youngest grandson, Frank Morton Ames, was later made manager of the Kingsley Iron & Machine Co. of Canton in which Oliver Ames & Sons had a controlling interest.

Lincoln's Emancipation Proclamation, Sept. 23, 1863

1865 Swedes gradually began to replace the Irish as laborers.

Civil War ended, 1865

1865 Antrim Shop built. Just north of it on Main Street, and behind a small pond, stood the

Company's blacksmith shop. This shop was torn down in 1931, and the Antrim Shop was remodelled into a private garage.

1865 The Company reported that during this year they made 65,500 dozen shovels in Easton, valued at $982,500, and employed 250 men. In spite of the increased product the decrease in workmen was due to the use of steam power and machinery.

Lincoln Shot, 1865

1866 The Old Colony Railroad ran a line through North Easton, taking over the Company's private branch to Stoughton.

1866 Handle Shop built.

1867 Plate-polishing Shop built.

1868 Antrim Opening Shop built.

1869 Canal from Picker Pond to Hoe Shop built.

Financial panic "Black Friday" in N.Y. caused by gold corner, 1869

1869 120,000 dozen shovels made during this year and 500 workmen employed. Orders being received from Europe, Australia, South America, Africa and China.

1869–70 New east wing of Long Shop (sometimes called the "storehouse") built.

Union Pacific Railroad completed, 1869

1870 Owing to business depression and failures of other firms Oliver Ames & Sons were forced to ask their creditors for a temporary suspension which was granted. They listed their liabilities at about $7,000,000. Within two years they paid all indebtedness with interest.

1873 Oakes Ames, the senior partner, died, and his sons Oakes Angier Ames and Oliver Ames 2d inherited his interest in the partnership.

Financial panic, 1873

1875 The Company reported that they made shovels valued at $1,500,000 in Easton during this year. The number of employees was not listed.

Telephone invented, 1875

1876 The firm was changed from a partnership and became 'Oliver Ames & Sons Corporation.' Oliver Ames, president; Oakes Angier Ames, superintendent, Frederick Lothrop Ames, treasurer; Oliver Ames, 2d, secretary.

1877 Oliver Ames died and Oakes Angier Ames succeeded him as president of the Corporation.

Incandescent light bulb invented, 1878

1880 New Plate Polishing Shop built.

1880 Addition to Antrim Opening Shop built.

1886 The Corporation were now making about 117,500 dozen shovels a year, or 451 shovels each working hour (for the shops worked ten hours a day) and employing 500 workmen. They operated shops in West Bridgewater, Canton and South Braintree in addition to the Easton plant.

1886 A great Freshet (on February 12) nearly undermined the Long Pond Dam.

1887 The large Barn on North Main Street, built in 1849, was burned. Owing to the railroad facilities fewer horses and oxen were now used, and these were stalled in the nearby Carriage House.

1887–88 Barn for storing hay built on Picker Lane.

1892 Shop in South Braintree sold.

1893 Frederick Lothrop Ames died and his son Oliver Ames succeeded him as treasurer of the Corporation.

1894 Barn on Picker Lane (built in 1887) burned, but rebuilt in 1895.

1897 A new Barn built to replace that which burned in 1887, and on the same site on North Main Street. The Carriage House which stood on the land where the Oliver Ames Memorial Seat now is, was moved and made part of it.

Cuban War, 1898

1899 Oakes Angier Ames died, and his son,

Hobart Ames, succeeded him as president of the Corporation.

1901 The Corporation was re-organized and the 'Ames Shovel & Tool Company, Inc.,' under a merger combining it with T. Rowland's Sons, of Cheltenham, Pa.; the Wright Shovel Co., of Anderson, Ind.; the St. Louis Shovel Co., of St. Louis, Mo.; the H. M. Myers Shovel Co., of Beaver Falls, Pa.; and the Elwood Steel Plant of Elwood, Ind. Handle-making plants in St. Albans, Me., Paris, Tex., and Warren, Pa., were also acquired. Hobart Ames was elected president and William Hadwen Ames secretary.

Panic of 1901

1903 The Easton shops had hitherto been lighted by kerosene lamps. A part of the Long Shop was now lighted by a dynamo built by Hobart Ames and William Hadwen Ames.

1924 Hobart Ames resigned as president of the Ames Shovel & Tool Company, and was succeeded by A. C. Howell.

1926 The Easton plant now completely lighted by electricity.

World War begins in Europe, 1914

America enters World War, 1917

Armistice, Nov. 1918

1926 Beginning in 1926 electricity was gradually introduced as the motive power in the plant to supersede steam, as steam had superseded water. The electrification was completed in 1929, when the last steam engine was dismantled and the last water-wheel discontinued.

1927 Shop in Canton, Mass., sold.

1928 William A. Ready succeeded A. C. Howell as president of the Ames Shovel & Tool Co.

1928 The barn on North Main Street, built in 1897, was remodelled into offices, and occupied in the autumn of this year.

1928–29 A new shop of steel, glass, concrete and asbestos, called the New Blade Shop, was

begun on Aug. 28, 1928 and completed in 1929.

1931 The 'Ames Shovel & Tool Company' was re-organized and combined with other plants as the 'Ames-Baldwin-Wyoming Co.' Richard Harte, great-great-great grandson of Captain John Ames was elected president.

1932 The main office of the Ames-Baldwin-Wyoming Co. was removed from Easton to Parkersburg, West Virginia, owing to the latter's more advantageous geographical position. The Easton works, however, continued in active operation.

1935 The land on which Captain John Ames's forge in West Bridgewater had stood, and where more than one hundred and sixty years before he had made the first Ames shovel, was deeded by the Ames family to the Town of West Bridgewater for a Memorial Park (opened July 4, 1936).

AMES GIFTS TO THE TOWN OF EASTON — 1869 TO 1935

(The dates given for buildings are those of the completion or opening)

High School Building (1869). Gift of Oliver Ames & Sons. Torn down in 1929.

Oakes Ames School Fund. Trust of $50,000. Gift of Oakes Ames by his will (1875).

Unity Church (1875), and *Parsonage* (1878). Gift of Oliver Ames, together with Trusts of $10,000 for their maintenance, by his will (1877). John Ames Mitchell, architect.

Methodist Church (formerly Unitarian Meeting-house). Gift of Oliver Ames to the Methodist Church Society in 1876.

Village Cemetery (1877). Gift of Oliver Ames & Sons Corporation. Trust of $10,000 for its maintenance given by Oliver Ames in his will (1877).

Oliver Ames Fund for Maintenance of Highways. Trust of $50,000. Gift of Oliver Ames by his will (1877).

Oliver Ames School Fund. Trust of $50,000. Gift of Oliver Ames by his will (1877).

Oakes Ames Memorial Hall (1881). Gift of Oakes Angier Ames and Gov. Oliver Ames. H. H. Richardson, architect.

Ames Free Library (1883). Gift of $35,000 — later increased by Frederick Lothrop Ames and Helen Angier Ames — for building and contents, together with Trust of $15,000 for maintenance, by Oliver Ames in his will (1877). His widow, Sarah Lothrop Ames, added $25,000 to the Trust for maintenance. H. H. Richardson, architect.

Rockery (1883). Built by Oliver Ames & Sons Corporation, but not deeded to the Town. Frederick Law Olmstead, architect.

Railroad Station (1884). Gift of Frederick Lothrop Ames to the Old Colony Railroad. H. H. Richardson, architect.

Oliver Ames Tree Planting Fund. Gift of $2,000 in 1886, and annually for several years thereafter, for planting trees along the Town highways by Gov. Oliver Ames.

Oliver Ames High School Building (1896). Gift of Gov. Oliver Ames.

Susan Ames French District Nurse Fund. Trust of $6,000 for support of district nursing. Gift of Susan Ames French by her will (1908). Available 1918.

Susan Ames French Parish Hall Fund. Trust of $3,000 for maintenance of the Parish Hall of Unity Church. Gift of Susan Ames French by her will (1908). Available 1918.

Susan Ames French Scholarships. Trust of $6,000 for college scholarships to pupils of Oliver Ames High School. Gift of Susan Ames French by her will (1908). Available 1918.

Oliver Ames Memorial Seat (1918) on Main Street nearly opposite the Oliver Ames senior homestead. Gift of his granddaughter, Sarah Emily Witherell.

Oakes Ames Memorial Hall Fund. Trust of $10,000 for maintenance of this Hall. Gift of William Hadwen Ames by his will (1918).

William Hadwen Ames School Fund. Trust to net $3,500 annually. Gift of William Hadwen Ames by his will (1918).

Catherine Hobart Ames Scholarships. Trust of $6,000 for college scholarships to pupils of Oliver Ames High School. Gift of Hobart Ames, Winthrop Ames and Katharine Ames Spalding (1918).

Grammar School Building (1916). Gift of Mary Shreve Ames, Frederick Lothrop Ames and John Stanley Ames in memory of Frederick Lothrop Ames and Rebecca Caroline Ames. Charles M. Baker and Stanley B. Parker, architects.

Mary Ames Frothingham Scholarships. For college scholarships to pupils of Oliver Ames High School. Given triennially by Mary Ames Frothingham (1920).

Louis A. Frothingham Memorial Playground (1930). Gift of Mary Ames Frothingham.

William Hadwen Ames Memorial Room of Ames Free Library (1931). Gift of Fanny Holt Ames. Shepley, Rutan & Coolidge, architects.

AMES HOUSES IN NORTH EASTON

Oliver Ames (b. 1779–d. 1863). First house, bought in 1803, in which his eldest son Oakes was born. Still standing (1936), though considerably altered, at 46 Pond Street.

Oliver Ames (b. 1779–d. 1863). Homestead, 25 North Main Street. Built 1813–1814.

Oliver Ames (b. 1807–d. 1877). First house, built in 1833, beside his father's on North Main Street. Moved in 1864 to Oliver Street, and still standing (1936).

Oakes Angier Ames (b. 1829–d. 1899). Off North Main Street. Built 1853–1854. Andrew J. Downing, architect. Enlarged 1873, John Ames Mitchell, architect. "Queset."

Frederick Lothrop Ames (b. 1835–d. 1893). Between Oliver, Elm and Main Streets. Built 1859. Snell & Gregerson, architects. Enlarged 1876, John Ames Mitchell, architect; enlarged 1890, Shepley, Rutan & Coolidge, architects; addition, 1913, Herbert Browne, architect. "Langwater."

Oliver Ames (b. 1831–d. 1895). Off Oliver Street. Built 1862.

Oliver Ames (b. 1807–d. 1877). Second house. Built 1864 on same site as his first (see above) though farther back from the street. "Unity Close."

Frederick Lothrop Ames (b. 1835–d. 1893). Gate Lodge, Elm Street. Built 1881. H. H. Richardson, architect.

Hobart Ames (b. 1865). Off North Main Street. Built 1890. Fehmer & Page, architects.

Oliver Ames (b. 1864–d. 1929). Off Main Street. Built 1893. Arthur Rotch, architect. "Sheep Pasture."

William Hadwen Ames (b. 1861–d. 1918). Off Elm Street. Built 1893–1894. Carl Fehmer, architect.

Frederick Lothrop Ames (b. 1876–d. 1921). Off Washington Street. Built 1905. Parker, Thomas & Rice, architects.

Oakes Ames (b. 1874). Near North Easton-Stoughton Line. Built 1910. Blanche Ames, architect. "Borderland"

Mary Shreve Ames (b. 1867). Elm Street. Built 1912. Guy Lowell, architect. "Wayside."

SOME REPEATED FAMILY GIVEN NAMES

JOHN. Up to the eleventh generation there was but one family in our line that did not have a son named John. This is not strange, for John is unquestionably the most frequent given name in the English language. It comes from the Hebrew, means 'God's gracious gift,' and commemorates the beloved disciple of the New Testament.

OLIVER. The first member of the family to be so named is Oliver senior, who came to Easton from Bridgewater in 1803. Although his father was born more than a century after the death of Oliver Cromwell, who beheaded Charles II. and ruled as Lord Protector of England during the Commonwealth, Cromwell was still honored in New England, where British sovereigns were unpopular particularly during the Revolutionary War when Oliver was born. It is therefore probable that the name was given him in memory of Cromwell. It comes from the Latin, meaning 'the olive,' and signifies 'victorious peace' because an olive wreath crowned the victor in ancient athletic contests.

OAKES. This name came into the family through Susanna Angier who joined its two branches by her marriage with Oliver Ames senior in 1803. Her father, Oakes Angier, was named from his maternal great-grandfather, Urian Oakes, who was president of Harvard College (see page 78). The name means 'the oak tree,' signifying sturdiness.

ANGIER. This name was also brought into the family by Susanna Angier, whose forebears had borne it in America for five generations. It was originally d'Angiers, and signified that the original Angiers came from the city of Angiers in France.

EVELINA. Evelina, in its later form of Evelyn, has been a favorite female first name since Evelina Orville Gilmore introduced it into the family when she married Oakes Ames in 1827. She was called Evelina Orville from the heroine of Fanny Burney's novel 'Evelina,' who married Lord Orville — a novel highly popular at the time of Evelina's

birth. The name is an elaborated form of Eve, and means 'life' because Eve was the mother of all living.

LOTHROP. This name came into the family when Sarah Lothrop married Oliver Ames 2d in 1833. Her father represented the Easton district in the Massachusetts Legislature and Senate for many years. He traced his American descent to Mark Lothrop who came from England to New England before 1643. The name comes from the Old English 'Low-thorp,' meaning 'valley village.'

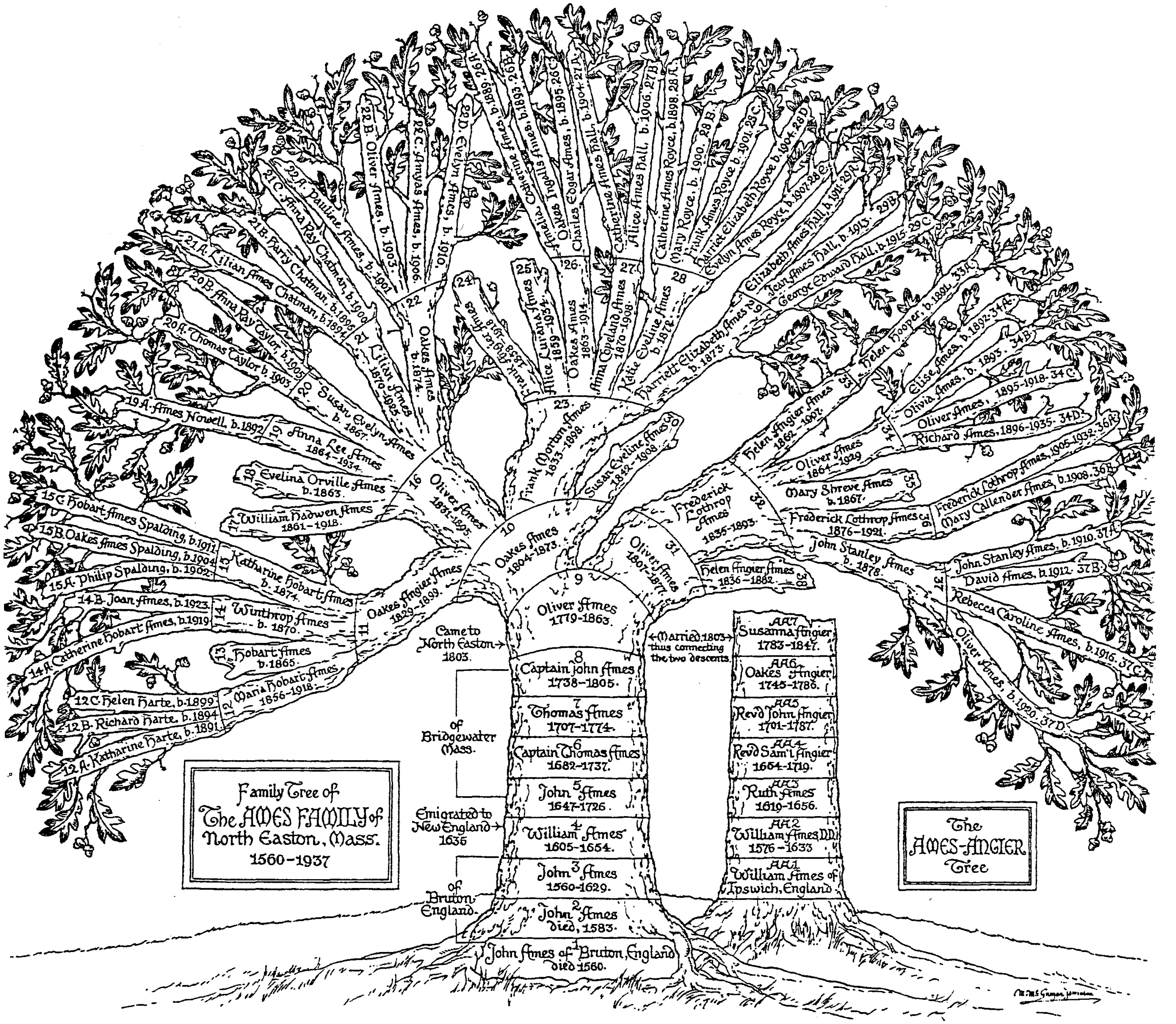
HOBART. This name came into the family through the marriage of Oakes Angier Ames and Catherine Hobart, daughter of Judge Aaron Hobart, M.C., sixth in descent from Edmund Hobart who emigrated from England to Hingham, Mass., in 1633. Edmund Hobart was probably a younger son of Sir Henry Hobart, chief justice of the Queen's Bench under Queen Elizabeth who was removed by James I. for proclaiming in his court that "in England the law is above the King." The name is a form of Hubert, and means 'intelligent.'

THE AMES MONUMENT AT SHERMAN SUMMIT

Sherman Summit, 8,250 feet above sea level, is the highest point on the line, and here an impressive granite pyramid stands as a monument to the brothers Ames. When Oakes Ames died the directors of the road passed a resolution terming him 'The Builder of the Union Pacific,' and two years later the stockholders voted to erect a monument in his memory. But as Oliver Ames died before it was begun it was determined to make it also a memorial to him. The work was finished in 1882.

The pyramid, sixty feet at the base and sixty-five feet high, is of roughly squared blocks of pinkish granite quarried from a huge free-standing mass of rock about two miles distant from its site. The side toward the track is inscribed 'In Memory of Oakes Ames and Oliver Ames,' and the easterly face shows a bas-relief portrait of Oakes, the westward one of Oliver.

When in 1901 the line across the Summit was straightened the Ames monument was left deserted some three miles north of the present track. It was at one time proposed that the monument should be moved, stone by stone, to a new site on the line, and re-erected in season to commemorate the fiftieth anniversay of the completion of the road; but this project was never carried out. Later, however, the Lincoln Highway was laid out along the railroad's original line, and travelers by motor now pass near the memorial.



Family Tree of
The AMES FAMILY of
North Easton, Mass.
1560–1937
The
AMES-ANGIER
Tree
1 John Ames of Bruton, England died 1560.
2 John Ames died, 1583.
3 John Ames 1560-1629.
4 William Ames 1605-1654.
5 John Ames 1647-1726.
6 Captain Thomas Ames 1682-1737.
7 Thomas Ames 1707-1774.
8 Captain John Ames 1738-1805.
9 Oliver Ames 1779-1863.
10 Oakes Ames 1804-1873.
11 Oakes Angier Ames 1829-1899.
12 Maria Hobart Ames 1856-1918.
12 A. Katharine Harte, b. 1891.
12 B. Richard Harte, b. 1894.
12 C. Helen Harte, b. 1899.
13 Hobart Ames b. 1865.
14 Winthrop Ames b. 1870.
14 A. Catherine Hobart Ames, b. 1919.
14 B. Joan Ames, b. 1923.
15 Katharine Hobart Ames b. 1874.
15 A. Philip Spalding, b. 1902.
15 B. Oakes Ames Spalding, b. 1904.
15 C. Hobart Ames Spalding, b. 1911.
16 Oliver Ames 1831-1895.
17 William Hadwen Ames 1861-1918.
18 Evelina Orville Ames b. 1863.
19 Anna Lee Ames 1864-1934.
19 A. Ames Nowell, b. 1892.
20 Susan Evelyn Ames b. 1867.
20 A. Thomas Taylor b. 1903.
20 B. Anna Ray Taylor, b. 1905.
21 Lilian Ames 1870-1925.
21 A. Lilian Ames Chatman, b. 1894.
21 B. Harry Chatman, b. 1896.
21 C. Anna Ray Chatman, b. 1900.
22 Oakes Ames b. 1874.
22 A. Pauline Ames, b. 1901.
22 B. Oliver Ames, b. 1903.
22 C. Amyas Ames, b. 1906.
22 D. Evelyn Ames, b. 1910.
23 Frank Morton Ames 1833-1898.
24 Frank Mayer Ames 1858-1918.
25 Alice Luranna Ames 1859-1934.
26 Oakes Ames 1863-1914.
26 A. Amelia Catherine Ames, b. 1889.
26 B. Oakes Ingalls Ames, b. 1893.
26 C. Charles Edgar Ames, b. 1895.
27 Anna Copeland Ames 1870-1908.
27 A. Catherine Ames Hall, b. 1904.
27 B. Alice Ames Hall, b. 1906.
28 Katie Eveline Ames b. 1872.
28 A. Catherine Ames Royce, b. 1898.
28 B. Mary Royce, b. 1900.
28 C. Frank Ames Royce, b. 1901.
28 D. Harriet Elizabeth Royce b. 1904.
28 E. Evelyn Ames Royce, b. 1907.
29 Harriett Elizabeth Ames b. 1873.
29 A. Elizabeth Ames Hall, b. 1911.
29 B. Jean Ames Hall, b. 1913.
29 C. George Edward Hall, b. 1915.
30 Susan Eveline Ames 1842-1908.
31 Oliver Ames 1807-1877.
32 Frederick Lothrop Ames 1835-1893.
33 Helen Angier Ames 1862-1907.
33 A. Helen Hooper, b. 1891.
34 Oliver Ames 1864-1929.
34 A. Elise Ames, b. 1892.
34 B. Olivia Ames, b. 1893.
34 C. Oliver Ames, 1895-1918.
34 D. Richard Ames, 1896-1935.
35 Mary Shreve Ames b. 1867.
36 Frederick Lothrop Ames 1876-1921.
36 A. Frederick Lothrop Ames, 1905-1932.
36 B. Mary Callender Ames, b. 1908.
37 John Stanley Ames b. 1878.
37 A. John Stanley Ames, b. 1910.
37 B. David Ames, b. 1912.
37 C. Rebecca Caroline Ames, b. 1916.
37 D. Oliver Ames, b. 1920.
38 Helen Angier Ames 1836-1882.
Came to North Easton 1803.
of Bridgewater Mass.
Emigrated to New England 1635
of Bruton England.
Married 1803 thus connecting the two descents.
AA7 Susanna Angier 1783-1847.
AA6 Oakes Angier 1745-1786.
AA5 Revd John Angier 1701-1787.
AA4 Revd Sam'l Angier 1664-1719.
AA3 Ruth Ames 1619-1656.
AA2 William Ames D.D. 1576-1633.
AA1 William Ames of Ipswich, England