Sailing ships came to be known in Mesopotamia.

Stone came to be used to construct buildings in Guernsey, an island in the English Channel.

Corn (*Zea mays*) was coming to be cultivated in Meso-America. Cotton and avocados came to be grown in Mexico.

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**KING COTTON**

**A Week:** History has neither the venerableness of antiquity, nor the freshness of the modern. It does as if it would go to the beginning of things, which natural history might with reason assume to do; but consider the Universal History, and then tell us, — when did burdock and plantain sprout first?

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**5,000 BCE**

Sailing ships came to be known in Mesopotamia.

Stone came to be used to construct buildings in Guernsey, an island in the English Channel.

Corn (*Zea mays*) was coming to be cultivated in Meso-America. Cotton and avocados came to be grown in Mexico.

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**4,000 BCE**

<table>
<thead>
<tr>
<th>Plant</th>
<th>Name</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grape</td>
<td><em>Vitis vinifera</em></td>
<td>Eastern Mediterranean</td>
</tr>
<tr>
<td>Onion</td>
<td><em>Allium Cepa</em></td>
<td>Western Asia</td>
</tr>
</tbody>
</table>
*Vitis vinifera* is believed to have been cultivated from Afghanistan to the Black Sea.

Cotton seed dating from this period has been found in Pakistan.

At about this point, native North and South Americans, descended from Asians who’d crossed the land bridge across the Bering Strait long ago, hunted and cultivated corn. Archeological evidence of Mastodons driven to extinction, and arrowheads and spear points found in caves in Clovis and Folsom, New Mexico, establish that these natives lived in the New World for millennia — how many millennia is subject to debate.

Holocene delta development worldwide transgressive sequence of deltaic deposits.

At about this point, it was “Eden”; wet warm conditions in Near East, time of plenty.

At about this point, there was rapid development of a rich, fertile delta in Mesopotamia.
At about this point, the Irish elk decline, 4000 to 3250 BCE.

At about this point, in what is now the US; on Mississippi at 6000 BP, slowing sea level rise at 10-15 below present level, beginning of meander belts. Development of Pine Island Beach trend, a linear sand shoal developed when sea level slowed 10-15 ft. below present level at mouth of Mississippi (currently beneath Lake Pontchartrain).

At about this point, in Mesopotamia; Sea level, Persian Gulf Recent (1996) reviews of Persian Gulf paleosealevel indicates that levels were up to 2 meters higher than at present during the period 6000-4000 BP. In the Mesopotamian delta, stratigraphic relations showing the rapid development of a rich, fertile delta.
“As far as is known, no animals were domesticated in the Americas until a comparatively late date. Available evidence seems to indicate that, in spite of the early domestication of some plants, village life did not begin to develop on any scale until 3500 BCE: or possibly somewhat earlier in Mexico, following domestication of corn. The process of agricultural development was therefore rather slow, occurring in widely dispersed centres, often in areas of poor fertility, sometimes even in deserts. Cacao, tomatoes, and avocados were cultivated. Irrigation, terracing, and the construction of islands in lakes increased land usage in drier areas. The land was cleared by chopping and burning, and the seeds were sown with the aid of fire-hardened digging sticks. Crops were stored in pits or granaries. The corn was prepared by boiling in limewater and by wet grinding. Cornmeal paste was then made into tortillas or flat cakes and gruel. Fine textiles were woven of cotton, and paper was made from tree bark. Village life was based on the extended family, composed of parents and their children’s families. Villages were organized into larger territorial units based on ceremonial centres commonly in the form of flat-topped pyramids. Larger territorial units developed early in the 1st millennium AD.”

Cotton would be coming to be cultivated in India.
May: Sir James Lancaster and the surviving members of his crew arrived back in England:

**Chronological observations of America**

Sir Robert Duddeleys voyage to Trinidad, and the coast of Paria.

Mr. James Lancasters voyage to Fernambuck the port Town of Olinda in Brazil, in which voyage he took 29 ships and Frigats surprized the said port Town, and there found the Cargazon or fraught of a rich Indian Carack, which together with great abundance of sugars and Cottons he brought from thence; lading therewith fifteen sail of tall ships and barks.

**BY John Josselyn Gent.**

A Dutch planter introduced sugar cane from Brazil to Barbados, where the English settlers had been growing cotton, indigo, ginger, and tobacco.

A sailor, mistaking a tulip bulb for an onion, ate it for breakfast with his herring. An investor had hoped to realize, with that bulb in the tulip frenzy of the day, the equivalent of $25,000 to $50,000 in today’s money. –And presumably it didn’t even taste that good!
Summer: The Jesuit order was founding its initial settlement of its own (what they were terming a “reduction”) in New France, 60 miles out of Québec, Hôtel Dieu at Sillery. Meanwhile, up the slow-flowing Musketaquid River from Boston Harbor on the Great Road up the Nashobah Valley to the native villages of what would become southern New Hampshire, at the site of an existing village and fishing weir, the 1st inland European settlement in New England was being established, and was being (re)named Concord (not on the map as yet except as Musketaquid, because the existing map had been drawn in 1634). Six square miles were to appearances being purchased for mere wampum, hatchets, hoes, knives, cotton cloth, and a suit of clothing by two ministers, the Reverends Peter “Big Pray” Bulkeley and John Jones, and a soldier/merchant, Major Simon Willard.

Town tradition has it that this ceremony took place under the large oak in which the town bell would be hung, to be referred to thereafter as “Jethro’s tree,” and this tree is supposed to have stood in front of what is now the Middlesex House. According to Volume I of the Suffolk Record of Deeds, No. 34, and from Chapter I of THE HISTORY OF CONCORD, MASSACHUSETTS, passim,

Among these first white settlers of Concord were John Miles and his first wife Sarah, fresh from England. At the time they were spelling their family’s name as “Myles.”
[I HAVE MISPLACED THIS REFERENCE] implies in Book II, Chapter III, pages 48-9 that there is a reason why the land around the white settlement called “Concord” was let go so cheap by its tribal owners: said land was actually not sold at all, but leased, and said lease was merely for a purpose, the raising of cattle — so that what the Christian sachem Nattahattawants was undertaking on behalf of his tribe in return for some wampum and a suit of clothing was merely that the members of his band would take care not to use the land in the vicinity of Concord town in such a manner as to harm any of the cows let loose there to graze by the white people. And if despite this any of the white people’s cows should be harmed, they of course pledged that they would provide appropriate compensation. The writing specifically does not say “we relinquish all rights and will go away,” or anything like that; in fact you don’t have to be a lawyer and you don’t have to be attired in a three-piece suit to see that what this piece of paper implies is quite the opposite:

Nattahattawants, in the year 1642, sold to Simon Willard, in behalf of “Mr. Winthrop, Mr. Dudley, Mr. Nowell, and Mr. Alden,” a large tract of land upon both sides Concord River. “Mr. Winthrop, our present governor, 1260 acres, Mr. Dudley, 1500 acres, on the S. E. side of the river, Mr. Nowell, 500 acres, and Mr. Allen, 500 acres, on the N. E. side of the river, and in consideration hereof the said Simon giueth to the said Nattahattawants six fadoms of waompampege, one wastcoat, and one breeches, and the said Nattahattawants doth covenant and bind himself, that hee nor any other Indians shall set traps within this ground, so as any cattle might recieve hurt thereby, and what cattle shall recieve hurt by this meanes, hee shall be lyable to make it good.” [In the deed, Nattahattawants is called sachem of that land.]

Witnessed by The mark of NATTAHATTAWANTS.
three whites. The mark of WINNIPIN, an Indian that traded for him.

The name of this chief, as appears from documents copied by Mr. Shattuck, was understood Tahattawan, Tahattawants, Attawan, Attawanee, and Ahatawanee. He was sachem of Musketaquid, since Concord, and a supporter and propagator of Christianity among his people, and an honest and upright man. The celebrated Waban married his eldest daughter. John Tahattawan was his son, who lived at Nashobah, where he was chief ruler of the praying Indians – a deserving Indian. He died about 1670. His widow was daughter of John, sagamore of Patucket, upon the Merrimack, who married Oonamog, another ruler of the praying Indians, of Marlborough. Her only son by Tahattawan was killed by some white ruffians, who came upon them while in their wigwams, and his mother was badly wounded at the same time. Of this affair we shall have occasion elsewhere to be more particular. Naanashquaw, another daughter, married Naanishcow, called John Thomas, who died at Natick, aged 110 years.

The historical record with which Thoreau was familiar stated “I have sought in vain for the Indian deed” to the land of Concord.
The document in question had to be “reconstructed” by deposition in white court on October 7, 1684.

Had there ever actually been a title transaction by which the land of Concord passed from the red people to the white people?

−The white owners’ explanation is uniformly taken with great seriousness by all the serious white historians, yet to my way of thinking, as a plausible explanation, “I must somehow have misplaced my deed as I can’t seem to place my hands on it at this moment” ranks right up there with “the Devil made me do it,” or perhaps with “the dog ate my homework,” or perhaps even with “Eat my shorts!”

On or about November 11, 1837 Thoreau would indicate a familiarity with the contents of at least pages 2-3 and 6-9 of Doctor Lemuel Shattuck’s A HISTORY OF THE TOWN OF CONCORD;... which had recently appeared.
October: John Josselyn, Gent. arrived at his brother Henry’s home in Scarborough, where he would abide for some 15 months. While walking in the woods he spied what he presumed to be a kind of fruit:

His lip “swelled so extremly” that by the time he had stumbled home “They hardly knew me but by my Garments.” When he had recovered, he would give further thought to the strange gray nest: “Of what matter it’s made no man knows, wax it is not, neither will it melt nor fry, but will take fire suddenly like Tender.” What he didn’t realize was that the nest was pulp paper made from wood fiber by the paper-making Hornet, and had he succeeded in mastering this technical process, he could have revolutionized the paper-making industry of his age, based as it was at the time on the iffy supply of cotton and linen rags, and transformed himself from a comfortable into an extremely rich man.

Josselyn was bemused by the story of the “Mere-man” seen by one “Mr. Mitton” out in Casco-Bay: “Who laying his hands on the side of the Canow had one of them chopt off with a hatchet, which was in all respects like the hand of a man, the Triton presently sunk, dying the water with his purple blood, and was not more seen.” One can almost see him, wide-eyed and open-mouthed, scribbling away before the winking fishermen. “These with many other tales they told me” he admits, “The credit whereof I will neither impeach nor impune, but will satisfy myself with — ‘There are many strange things in the world than are to be seen between London and Maidenstone’.”

Jocelyn was the first to mention the famed sea-serpent of Nahant and of Egg Rock, in this year. He wrote that the serpent had been observed “quoiled up on a rock at Cape Ann.” (This apparition would be repeatedly seen in Gloucester Bay in August 1817, and occasionally also in Nahant Bay, by hundreds of observers. One skipper would allege soberly that it was “longer than the main-mast of a seventy-four.” Another would compare its length to the height of the steeple of the Gloucester meeting-house.)

1. His “Beloved Brother” was agent for the heirs of Sir Ferdinando Gorges and Captain John Mason, the proprietors of old Maine and New Hampshire and would rise to be the deputy governor of the province. The town is at the mouth of the Nonesuch River in what is now Maine. A suburb of Portland, it originated as “Black Point,” Thomas Cammock’s settlement, which combined in 1658 with Blue Point and with Stratton’s Islands to form a community modeling itself upon the Scarborough that is a resort on the North Sea coast of England.

2. Henry Wadsworth Longfellow would make use of this incident in his THE NEW ENGLAND TRAGEDIES. In the verse play “John Endicott” the innkeeper Samuel Cole would be made to exclaim:

I feel like Master Josselyn when he found
The hornets’ nest, and thought it some strange fruit,
Until the seeds came out, and then he dropped it.

“Stack of the Artist of Kouroo” Project
Admiral Sir William Penn (father of Friend William Penn) subjugated the Spanish island of Jamaica to the rule of Lord Protector Oliver Cromwell, his force of 5,000 men meeting with but little resistance.

As this kerfuffle of hegemony among the white folks was being transacted, various of the slaves of the Spanish residents seized upon their one golden opportunity. Escaping into the mountains of the interior of the island, they there established their own “Maroon” settlements. Admiral Sir William Penn thus unwittingly freed more black slaves, than his high-principled Quaker son ever would! Robert Sedgwick, born in Woburn, Bedfordshire, England in about 1611 and baptized on May 6, 1613, who had settled at Charlestown in the Massachusetts Bay Colony in 1635 and become a successful merchant there, for many years had represented Charlestown in the General Court and had helped organize the Ancient and Honorable Artillery Company, of which he had been the captain during 1640. He had during 1652 been the commander of all the Massachusetts militia, and had supervised the construction of the 1st fort at Boston. Lord Protector Oliver Cromwell had promoted him to major general, making him the first Major General of the Massachusetts Bay Colony. With John Winthrop, Jr., and others, he had established in 1643/1644 the first ironworks in the North America. In 1654 he had driven the French from the Penobscot region and Fort Pentagouet. In this year this Robert Sedgwick accompanied this British naval expedition against Jamaica, and would be made Governor General of the island (he would die there).

Within a few years Spain would have abandoned all efforts to recover this colony and the English settlers would be growing crops such as tobacco, cotton and cocoa, and logging off the indigo wood. However, it would be privateering and piracy that would help Port Royale (Kingston) become one of the richest towns in the Americas as well as most certainly the most notorious:
<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1640-1713</td>
<td>seven slave revolts in the islands of the British West Indies</td>
</tr>
<tr>
<td>1655</td>
<td>With Jamaica in transition between Spanish control and English control, some 1,500 slaves escaped into the mountains to form maroon communities.</td>
</tr>
<tr>
<td>1656</td>
<td>Juan de Bolas led many of the escaped slaves in the maroon communities of the mountains of Jamaica down to the plains and the coast with a deal in which the English granted pardon and freedom. Many maroons, however, would elect to remain in the mountains.</td>
</tr>
<tr>
<td>1668</td>
<td>“Lobby’s rebellion” on Jamaica — several hundred black slaves escaped to the mountains.</td>
</tr>
<tr>
<td>1725-1740</td>
<td>1st Maroon War on Jamaica</td>
</tr>
<tr>
<td>March 1, 1738-1739</td>
<td>The 1st Maroon War on Jamaica ended in a treaty guaranteeing freedom for the maroons, the deal being that henceforward they would capture and turn in for a reward any new slave or bond-laborer escapees.</td>
</tr>
<tr>
<td>1760</td>
<td>slave uprising on Jamaica</td>
</tr>
<tr>
<td>1776</td>
<td>slave uprising on Jamaica</td>
</tr>
<tr>
<td>1784</td>
<td>slave uprising on Jamaica</td>
</tr>
<tr>
<td>1795-1796</td>
<td>2d Maroon War on Jamaica</td>
</tr>
<tr>
<td>1823</td>
<td>slave uprising on Jamaica</td>
</tr>
<tr>
<td>1824</td>
<td>slave uprising on Jamaica</td>
</tr>
<tr>
<td>1831</td>
<td>slave uprising on Jamaica</td>
</tr>
</tbody>
</table>
1610 Henry IV. is murdered at Paris by Ravaillac, a priest.
1611 Baronets first created in England by James I.
1614 Napier of Marcheston, in Scotland, invents the logarithms.
    Sir Hugh Middleton brings the New River to London, from Ware.
1616 The first permanent settlement in Virginia.
1619 Dr. W. Harvey, an Englishman, discovers the doctrine of the circulation of
    the blood.
1620 The broad silk manufactory from raw silk introduced into England.
1621 New England planted by the Puritans.
1625 King James dies, and is succeeded by his son, Charles I.
    The island of Barbadoes, the first English settlement in the West Indies, is
    planted.
1632 The battle of Lutzen, in which Gustavus Adolphus, king of Sweden, and head
    of the protestants in Germany, is killed.
1635 Province of Maryland planted by lord Baltimore.
    Regular posts established from London to Scotland, Ireland, &c.
1640 King Charles disobliges his Scottish subjects, on which their army, under gene-
    ral Lesley, enters England, and takes Newcastle, being encouraged by the
    malcontents in England.
1641 The massacre in Ireland, when 40,000 English protestants were killed.
1642 King Charles impeaches five members, who had opposed his arbitrary mea-
    sures, which begins the civil war in England.
1643 Excise on beer, ale, &c. first imposed by parliament.
1649 Charles I. beheaded at Whitehall, January 30, aged 49.
1654 Cromwell assumes the protectorship.
1655 The English, under admiral Penn, take Jamaica from the Spaniards.
1658 Cromwell dies, and is succeeded in the protectorship by his son Richard.
1660 King Charles II. is restored by Monk, commander of the army, after an exile
    of twelve years in France and Holland.
John Seller’s *Atlas Maritimus* was published. It contained Captain Henry Southwood’s two charts of Newfoundland’s English Shore: “The Coast of Newfoundland from Salmon Cove to Cape Bonavista” and “Cape Race to Cape St. Francis.” These were the 1st large-scale charts of Newfoundland, naming over 150 ports and features. This “A Mapp of New England, 1675” appeared in the atlas, describing the region north-east of “Naraganfet Bay” not only as “Plymouth Colony” but also as “King Philhips Country,” showing the town of Providence as on the east side of the bay, opposite Shawomet (later known as Warwick) on the west side, and showing Concord as being on the “Noshaway River” leading due north into the “Mierinake
[The race war which we term King Philip’s War was] a war before television, before film, before photography ... even crude wood engravings were rare and printed books an uncommon commodity. When the English and Algonquian peoples of seventeenth-century New England went to war in 1675, they devastated one another. In proportion to population, their short, vicious war inflicted greater casualties than any other war in American history. Yet a single image of the fighting survives: half a dozen tiny, crouching figures shooting at one another along the creases of John Seller’s map of New England printed in an English atlas in 1675. It tells us precious little.... [N]ot even Christian Indians loyal to the English were spared; in the fall of 1675 most were removed from their towns and imprisoned on barren islands, where many died of cold or hunger during the long
winter. Always brutal and everywhere fierce, King Phil[1]ip’s War, as it came to be called, proved to be not only the most fatal war in all of American history but also one of the most merciless.

First manufacturing of gunpowder in America. The manufacture of guncotton was fraught. First you have to impregnate cotton with nitric acid, and in this operation, if the mixture gets a whiff of moisture it blows up. Then you have to grind the cotton into powder, and in this operation, if a portion of the mixture starts to dry out it blows up. You need to be at least a mile away while you are doing this kind of work. If that is not possible, you need to be doing this kind of work in scattered small buildings with exceedingly sturdy frames, all the siding of which is exceedingly lightweight and loosely attached. Preferably, the buildings should rural, and be at the base of some steep natural depression in the terrain, so that one does not annoy one’s neighbors with frequent loud noises and showers of debris.

It must have been in about this year that slavetraders brought cowpeas to Jamaica. A native of India, this pea has many varieties important in the southeastern US, particularly the black-eye and the crowders.

PLANTS

3. Let’s parse that by date, folks: in 1993, “remote control” would be spelled R-O-B-O-T, but in 1675 it was spelled S-L-A-V-E, and in 1859, I-R-I-S-H.
October 20, Monday (Old Style): Just to make sure this retro paperwork they were constructing appeared adequately impressive, the town of Concord added to the record in Cambridge a couple of depositions from friendly Indians living in Natick, Jehojakin AKA Mantatukwet (aged. 70 years or thereabouts) and Jethro (aged 70 years.
The Deposition of Jehojakin, alias Mantatukwet, a christian Indian of Natick aged. 70 years or thereabouts.

This Deponent testifieth and saith, that about 50 years since he lived within the bounds of that placed which is now called Concord, at the foot of an hill, named Nahshawtuck [Nawshawtuck Hill], now in the possession of Mr. Henry Woodis, and that he was present at a bargain made at the house of Mr. Peter Bulkeley (now Capt. Timothy Wheeler’s) between Mr. Simon Willard, Mr. John Jones, Mr. Spencer, and several others, in behalfe of the Englishmen who were settling upon the said town of Concord, and Squaw Sachem, Tahattawan, and Nimrod, Indians, which said Indians (according to their particular rights and interest) then sold a tract of land containing six miles square (the said house being accounted about the centre) to the said English for a place to settle a town in; and he the said deponent saw said Willard and Spencer pay a parcell of Wampumpeage, hatchets, hoes, knives, cotton cloth, and shirts, to the said Indians for the said tract of land. And in particular perfectly remembers that Wibbacowet, husband to Squaw Sachem, received a suit of cotton cloth, an hat, a white linen band, shoes, stockings, and a great coat, upon account of said bargain. And in the conclusion the sd Indians declard themselvs sattisfyed & told the Englishmen they were Welcome. There were present also at the said bargain Waban, merchant; Thomas, his brother-in-law; Notawquatuchquaw; Tantumous, now called Jethro.
The Deposition of Jethro a Christian Indian of Natick aged 70 years or therabouts:

This Deponent testifieth and saith, that about 50 years since, he dwelt at Nashobah, near unto the place now called by the English Concord; and that coming to said Concord was present at the making a bargain (which was done at the house of Mr. Peter Bulkeley, which now Capt. Timothy Wheeler liveth in) between several Englishmen (in behalfe of such as were settling said place) viz. Mr. Simon Willard, Mr. John Jones, Mr. Spencer, and others, on the one party; and Squaw Sachem, Tahattawan, and Nimrod, Indians, on the other party; and that the said Indians (according to their several rights) did then sell to the said English a certain tract of land containing six miles square (the said house being accounted about the centre) to plant a town in; and that the said deponent did see the said Willard and Spencer pay to the said Indians for the said tract of land a parcel of Wampumpeage, [like Jehojakin's testimony as far as "said bargain"]; and that after the bargain was concluded, Mr. Simon Willard, pointing to the four quarters of the world, declared that they had bought three miles from that place, east, west, north, and south; & the sd Indians manifested their free consent thereunto. There were present at the making of the said bargain, amongst other Indians, Waban merchant; Thomas, his brother-in-law; Natawquatuckquaw; Jehojakin, who is yet living and depoeth in like manner as above.
In Rhode Island harbors alone, during this year alone, it has been estimated by Alexander Boyd Hawes, some 6 negreros were being fitted out for the international slave trade. If an average cargo of slaves was 109—as we have estimated on the basis of a number of known cargos—then a total of something like 654 souls would have been being transported over the dread Middle Passage during this year in Rhode Island bottoms alone.

Two inventions important to the development of the cloth industry occurred during this year. John Jay devised the fly-shuttle and John Wyatt devised a technique for spinning by rollers. Because these developments would have an impact on the demand for bales of cotton as a raw material for cloth, it would eventually have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.4

W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, “if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances.”5 This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances.6 The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860.7 Very early, therefore, came the query whence the supply

4. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export — such production not beginning until 1789. In fact, according to page 92 of Seybert’s STATISTICS, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.
of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system.

The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8¼d. From this time until 1845 the price steadily fell, until in the latter year it reached 4d.; the only exception to this fall was in the years 1832-1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d.

The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860. The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that,

6. A list of these inventions most graphically illustrates this advance: —
1748, Lewis Paul, carding-machine.
1760, Robert Kay, drop-box.
1772, James Lees, improvements on carding-machine.
1775, Richard Arkwright, series of combinations.
1779, Samuel Compton, mule.
1785, Edmund Cartwright, power-loom.
1803-4, Radcliffe and Johnson, dressing-machine.
1817, Roberts, fly-frame.
1818, William Eaton, self-acting frame.
1825-30, Roberts, improvements on mule.
8. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d.
in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.9

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton "corner;" by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’état, which failed in the war of 1861-1865.10

9. From United States census reports.
10. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
In Rhode Island harbors alone, during this year alone, it has been estimated by Alexander Boyd Hawes, some 3 negreros were being fitted out for the international slave trade. If an average cargo of slaves was 109—as we have estimated on the basis of a number of known cargos—then a total of more than 325 souls would have been being transported over the dreadful Middle Passage during this year in Rhode Island bottoms alone.

An invention important to the development of the cloth industry occurred during this year. Lewis Paul devised a carding machine. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery—and in terms of the international slave trade.\textsuperscript{11}

This was the year of the “grace” experience of John Newton. “Amazing Grace” therefore seems a most inappropriate title for a movie about the crusade against the British slave trade. The hymn would be written by the Reverend Newton (played in Michael Apted’s film by Albert Finney) not about his belated awareness that the business in which he had been engaged was immoral, but about his famous religious “rebirth” experience years before he had become the captain of a negro vessel. This religious experience was not what led him to abandon the slave trade, but rather, was part of the context that led him to enter upon this immoral way to make a living. The religious awakening he had experienced after a near-fatal illness and a dangerous shipwreck had caused him to seek to become a respectable person, turning away from a youth spent in general dissipation. It would be after getting right with God in this way that he would enter the slave trade and make quite a success of himself, rising to be a captain of a slaving ship and thereby winning the approval of his girlfriend’s parents for their union. He would be writing hymns as his ship lay at anchor along West African shores, collecting its cargo of black slaves. For three decades after his experience of “grace” during this year, nothing would suggest to this man that there was anything wrong with how he was earning his living. It would not be until after he had retired from the slave trade (largely it seems for reasons of health, rather than due to any spiritual uneasiness) and taken up other employment on land, that he would gradually be brought to question the rightfulness of human enslavement. In short, “Amazing Grace” is a record of the religious experience that had turned Newton toward becoming a slavetrader, rather than of any mature reflection that had turned him away from it.

Also, although the script of this movie tells a pleasant enough personal story, it displays no awareness of the 11. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export—such production not beginning until 1789. In fact, according to page 92 of Seybert’s STATISTICS, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.
historical influences that had led to the opposition to the continuance of the international slave trade. In the movie, Friend Thomas Clarkson (played in Apted’s film by Rufus Sewell), is portrayed as one who turned William Wilberforce’s anti-slavery sentiments into action, but Friend Thomas did not originate these attitudes. Nor did Olaudah Equiano, himself a slavetrader (played in Apted’s film by Youssou N’Dour). The preface to his Essay on the Slavery and Commerce of the Human Species, written in 1785, acknowledges the priority of the writings of New Jersey’s Friend John Woolman, whose Essay on the Keeping of Negroes was first published in Philadelphia in 1754, and the priority of the writings of Pennsylvania’s Friend Anthony Benezet, who published a number of anti-slavery works in Philadelphia during the same period, and acknowledges the stance of Philadelphia Yearly Meeting taken in 1754 to absolutely condemn all human slavery. This was not only before either Clarkson or Wilberforce had been born, but also while a saved-by-grace John Newton was still captaining his negrero vessel in the international slave trade.

The “Amazing Grace” movie was meant to commemorate the 200th anniversary of the passing of the bill that allowed the slave trade in the British Empire, an event that constitutes its climactic scene, but the movie leaves it unclear that this legislation did nothing to abolish slavery. The best source for Wilberforce’s actual racial attitudes is Jack Gratias’s 1973 The Great White Lie: Slavery, Emancipation and Changing Racial Attitudes (Hutchinson of London). Actually he was opposed to the immediate abolition of slavery, and this opposition would allow it to persist in Jamaica and other British colonies for another 30 long years, and one is entitled to one’s ambivalence about such a track record. Wilberforce (played in Apted’s film by Ioan Gruffudd) feared that enslavement had such an impact on the mind of an enslaved person, that it could not be so readily ended: “I look to the improvement of their minds, and to the diffusion among them of those domestic charities which will render them more fit, than I fear they now are, to bear emancipation.”

W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances." This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances. The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860. Very early, therefore, came the query

13. A list of these inventions most graphically illustrates this advance: —
1748, Lewis Paul, carding-machine.
1760, Robert Kay, drop-box.
1772, James Lees, improvements on carding-machine.
1775, Richard Arkwright, series of combinations.
1779, Samuel Compton, mule.
1785, Edmund Cartwright, power-loom.
1803,4, Radcliffe and Johnson, dressing-machine.
1817, Roberts, fly-frame.
1818, William Eaton, self-acting frame.
1825-30, Roberts, improvements on mule.
whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple. Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system.

The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8¼d. From this time until 1845 the price steadily fell, until in the latter year it reached 4d.; the only exception to this fall was in the years 1832-1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d. The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860.15 The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.16

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton “corner;” by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many

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15. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d.
16. From United States census reports.
survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’état, which failed in the war of 1861-1865.17

The colony of South Carolina attempted to rid itself of slavery, only to be blocked by Great Britain (Burge, COMMENTARIES, I. 737, note; W.B. Stevens, HISTORY OF GEORGIA, I. 286).

W.E. Burghardt Du Bois: South Carolina had the largest and most widely developed slave-trade of any of the continental colonies. This was owing to the character of her settlers, her nearness to the West Indian slave marts, and the early development of certain staple crops, such as rice, which were adapted to slave labor.18 Moreover, this colony suffered much less interference from the home government than many other colonies; thus it is possible here to trace the untrammeled development of slave-trade restrictions in a typical planting community. As early as 1698 the slave-trade to South Carolina had reached such proportions that it was thought that “the great number of negroes which of late have been imported into this Collony may endanger the safety thereof.” The immigration of white servants was therefore encouraged by a special law.19 Increase of immigration reduced this disproportion, but Negroes continued to be imported in such numbers as to afford considerable revenue from a moderate duty on them. About the time when the Assiento was signed, the slave-trade so increased that, scarcely a year after the consummation of that momentous agreement, two heavy duty acts were passed, because “the number of Negroes do extremely increase in this Province, and through the afflicting providence of God, the white persons do not proportionately multiply, by reason whereof, the safety of the said Province is greatly endangered.”20 The trade, however, by reason of the encouragement abroad and of increased business activity in exporting naval stores at home, suffered scarcely any check, although repeated acts, reciting the danger incident to a “great

17. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
20. The text of the first act is not extant: cf. Cooper, STATUTES, III. 56. For the second, see Cooper, VII. 365, 367.
importation of Negroes," were passed, laying high duties.\(^{21}\) Finally, in 1717, an additional duty of £40,\(^{22}\) although due in depreciated currency, succeeded so nearly in stopping the trade that, two years later, all existing duties were repealed and one of £10 substituted.\(^{23}\) This continued during the time of resistance to the proprietary government, but by 1734 the importation had again reached large proportions. "We must therefore beg leave," the colonists write in that year, "to inform your Majesty, that, amidst our other perilous circumstances, we are subject to many intestine dangers from the great number of negroes that are now among us, who amount at least to twenty-two thousand persons, and are three to one of all your Majesty’s white subjects in this province. Insurrections against us have been often attempted."\(^{24}\) In 1740 an insurrection under a slave, Cato, at Stono, caused such widespread alarm that a prohibitory duty of £100 was immediately laid.\(^{25}\) Importation was again checked; but in 1751 the colony sought to devise a plan whereby the slightly restricted immigration of Negroes should provide a fund to encourage the importation of white servants, "to prevent the mischiefs that may be attended by the great importation of negroes into this Province."\(^{26}\) Many white servants were thus encouraged to settle in the colony; but so much larger was the influx of black slaves that the colony, in 1760, totally prohibited the slave-trade. This act was promptly disallowed by the Privy Council and the governor reprimanded;\(^{27}\) but the colony declared that "an importation of negroes, equal in number to what have been imported of late years, may prove of the most dangerous consequence in many respects to this Province, and the best way to obviate such danger will be by imposing such an additional duty upon them as may totally prevent the evils."\(^{28}\) A prohibitive duty of £100 was accordingly imposed in 1764.\(^{29}\) This duty probably continued until the Revolution.

An invention important to the development of the cloth industry occurred during this year. Robert Kay developed the drop-box. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would eventually have consequences in terms of human slavery — and in terms of the international slave trade.\(^{30}\)

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\(^{21}\) Cf. Grimké, Public Laws of S. Carolina, page xvi, No. 362; Cooper, Statutes, II. 649. Cf. also Governor Johnson to the Board of Trade, Jan. 12, 1719-20; reprinted in Rivers, Early History of S. Carolina (1874), App., xii.

\(^{22}\) Cooper, Statutes, VII. 368.

\(^{23}\) Cooper, Statutes, III. 56.

\(^{24}\) From a memorial signed by the governor, President of the Council, and Speaker of the House, dated April 9, 1734, printed in Hewatt, Historical Account of S. Carolina and Georgia (1779), II. 39; reprinted in S.C. Hist. Coll. (1836), I. 305-6. Cf. N.C. Col. Rec., II. 421.


\(^{26}\) Cooper, Statutes, III. 739.

\(^{27}\) The text of this law has not been found. Cf. Burge, Commentaries on Colonial and Foreign Laws, I. 737, note; Stevens, History of Georgia, I. 286. See instructions of the governor of New Hampshire, June 30, 1761, in Gordon, History of the American Revolution, I. letter 2.

\(^{28}\) Cooper, Statutes, IV. 187.

\(^{29}\) This duty avoided the letter of the English instructions by making the duty payable by the first purchasers, and not by the importers. Cf. Cooper, Statutes, IV. 187.
trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances." 31 This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances. 32 The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860. 33 Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system.

The development of Southern slavery has heretofore been viewed

30. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export — such production not beginning until 1789. In fact, according to page 92 of Seybert’s STATISTICS, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.
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so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8½d. From this time until 1845 the price steadily fell, until in the latter year it reached 4d.; the only exception to this fall was in the years 1832-1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d.

The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860. The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton “corner;” by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’état, which failed in the war of 1861-1865.

34. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d.
35. From United States census reports.
36. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
Before the use of labor-saving machinery, the labor input for a pound of cotton thread was 12-14 days. For an equivalent amount of silk thread, by way of contrast, the labor input was 6 days, for linen thread, 2-5 days, for wool, 1-2 days. Cotton was not the most economical garment material, but, except for fine furs, the very most expensive. However, fine cotton muslin was found to be aesthetically preferable.37

And yet — in fact you need only draw a single thread at any point you choose out of the fabric of life and the run will make a pathway across the whole, and down that wider pathway each of the other threads will become successively visible, one by one. — Heimito von Doderer, *Die Dämonen*

At this point all spinning to produce cotton muslin was by hand. However, during the 1770s in England, Richard Arkwright’s spinning machine and James Hargreaves’s patent spinning-jenny with multiple spindles powered by water would be transforming this situation. By 1784 all spinning would be by machine, while the production of cotton cloth would have increased by a multiplier of 24. By 1812 the cost of producing a pound of cotton thread would have declined by one order of magnitude and, by the early 1860s, by two orders of magnitude: 100 times less labor intensive!

In Rhode Island in this year, it is estimated by Alexander Boyd Hawes, some 16 vessels were being fitted out for the international slave trade. If an average cargo of slaves was 109—as we have estimated on the basis of a number of known cargos—then a total of well over 1,700 souls were being transported in Rhode Island bottoms alone. An example would be the brig *Othello*, which in this year is known to have transported a cargo of 90 souls.

In the winter of this year John Brown would be fitting out a vessel for another slaving expedition to Guinea, but this time instead of using the *Sally* he would be using a vessel with a larger carrying capacity, the *Sultan*. The objective would be to make back all the money that had been lost, and then some.

At about this point in time, the colony of Connecticut was attempting to prohibit all importation of slaves. It was attempting to prohibit this importation not because such was being adjudged to be injurious to the slaves but because such was being adjudged to be injurious to the poor people (poor white people) who needed to compete on the open market with their free labor, and not because such was being adjudged to be inconvenient to the slaves but because such was being adjudged to be inconvenient to the white citizens of Connecticut—the people, after all, who really mattered:

> Title and text not found. "Whereas, the increase of slaves is injurious to the poor, and inconvenient, therefore," etc. Fowler, *Historical Status of the Negro in Connecticut, in Local Law, etc.*, page 125.

Two inventions important to the development of the cloth industry occurred during this year. Richard Arkwright developed a water-frame and throttle, and James Watt devised a steam-engine. Because these developments would have an impact on the demand for bales of cotton as a raw material for cloth, it would eventually have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery—and in terms of the international slave trade.

38. *Othello*, what a strange name for a *negrero* vessel during an era in which, in presentations of William Shakespeare’s play, the title role was of necessity being performed by an American white man wearing dark body makeup!—Obviously, some Shakespeare nut in Rogue Island had a considerable sense of humor!—What's next, the brigantine *Gen. Nat Turner*?

39. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export—such production not beginning until 1789. In fact, according to page 92 of Seybert’s *Statistics*, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.
W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances."  

This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances. The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860. Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple. Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system. The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we

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42. Baines, HISTORY OF THE COTTON MANUFACTURE, page 215. A bale weighed from 375 lbs. to 400 lbs.
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world's cotton market. Beginning with 1820, a little after the
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45. Cf. United States census reports; and Olmsted, The Cotton Kingdom.
In England, Richard Arkwright’s spinning machine and James Hargreaves’s patent spinning-jenny with multiple spindles powered by water would during this decade be transforming the production of cotton muslin. In 1765 all spinning had been by hand and by 1784 all spinning would be by machine, while in that period the production of cotton cloth would have increased by a multiplier of 24. By 1812 the cost of producing a pound of cotton thread would have declined by one order of magnitude and, by the early 1860s, by two orders of magnitude: 100 times less labor intensive!46

John Newton’s hymn “Amazing Grace,” now famously sung of course by Joan Baez:

Amazing Grace! How sweet the sound!
That saved a wretch like me!
I once was lost, but now am found
Was blind but now I see.

'Twas grace that taught my heart to fear.
And grace my fears relieved;
How precious did that grace appear
The hour I first believed!

Through many dangers, toils and snares
I have already come.
'Tis grace hath brought me safe thus far,
And grace will lead me home!

The Lord has promised good to me,
His word my hope secures;
He will my shield and portion be,
As long as life endures.

Yes, when this flesh and heart shall fail,
And mortal life shall cease;
I shall possess within the vail,
A life of joy and peace!47

46. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export — such production not beginning until 1789. In fact, according to page 92 of Seybert’s STATISTICS, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.

47. We do not know to what melodies this was originally sung. Eventually the melody used would be the one for the hymn “New Britain,” and would be such a successful appropriation that the original verses for that melody have been quite lost. You will note that some of Newton’s stanzas are absent in the current Joan Baez version. Also, a verse of the hymn “Jerusalem, My Happy Home” would be added by Harriet Beecher Stowe in UNCLE TOM’S CABIN:

When we’ve been there ten thousand years,
Bright shining as the sun;
We’ve no less days to sing God’s praise
Than when we first begun!
Also occurring during this year was an invention important to the development of the cloth industry, and human slavery: James Lees developed improvements on the carding-machine. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of the international slave trade.48

W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single

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This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances. The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860. Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system.

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50. A list of these inventions most graphically illustrates this advance: —
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the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d. The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860. The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton “corner;” by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’état, which failed in the war of 1861-1865.

The Virginia legislature, in acting upon the recommendations of its committee on slaves, of which Thomas Jefferson had been a part, decided not to incorporate Jefferson’s “significant additions” to their code. We may infer from this that Jefferson’s aversion toward the presence in Virginia of non-enslaved Negroes, and his aversion toward white women who gave birth to children of mixed race, was more emphatic than less emphatic than the usual sentiment among white Virginians of the period. Conor Cruise O’Brien has commented, in regard to Jefferson’s desire to make an outlaw of any white woman with a baby of mixed race, his proposition that both mother and child if they did not leave the state within one year would be declared outside “the protection of the laws”:

In the circumstances that proposition was a license for lynching – for the physical destruction of mother

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53. From United States census reports.
54. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
and child by any Virginian who might care to do the job. Volunteers would not be lacking.

The much maligned Conor Cruise O’Brien is of course not alone in such sentiments:

“The United States of America had human slavery for almost one hundred years before that custom was recognized as a social disease and people began to fight it. Imagine that. Wasn’t that a match for Auschwitz? What a beacon of liberty we were to the rest of the world when it was perfectly acceptable here to own other human beings and treat them as we treated cattle. Who told you we were a beacon of liberty from the very beginning? Why would they lie like that? Thomas Jefferson owned slaves, and not many people found that odd. It was as though he had an infected growth on the end of his nose the size of a walnut, and everybody thought that was perfectly OK.”

- Kurt Vonnegut, FATES WORSE THAN DEATH, page 84

An invention important to the development of the cloth industry occurred during this year. Richard Arkwright developed a series of combinations. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would eventually have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.56

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inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances.\(^{58}\) The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860.\(^{59}\) Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

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\(^{59}\) Baines, HISTORY OF THE COTTON MANUFACTURE, page 215. A bale weighed from 375 lbs. to 400 lbs.
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The property of the wealthy Philipse family, including Philipsburg Manor in Sleepy Hollow, New York, was confiscated because the family had been loyal to the king of England. Everything, including every one of their numerous slaves, now belonged to somebody else — some one or another of the victorious Freedom Fighters who had struck a blow for human dignity.

“It is simply crazy that there should ever have come into being a world with such a sin in it, in which a man is set apart because of his color — the superficial fact about a human being. Who could want such a world? For an American fighting for his love of country, that the last hope of earth should from its beginning have swallowed slavery, is an irony so withering, a justice so intimate in its rebuke of pride, as to measure only with God.”

— Stanley Cavell, MUST WE MEAN WHAT WE SAY?
1976, page 141

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68. From United States census reports.
James Watt invented an arrangement of connecting rods that guided the piston rod of a steam engine in a perpendicular motion and produced parallel motion, thus rendering his 1782 double-acting rotary steam engine an effective design.

As of 1765 all spinning to produce cotton muslin had been by hand. However, during the 1770s in England, Richard Arkwright’s spinning machine and James Hargreaves’s jenny had transformed this situation and at this point all spinning was by machine, while the production of cotton cloth had increased by a multiplier of 24.

By 1812 the cost of producing a pound of cotton thread would have declined by one order of magnitude and, by the early 1860s, by two orders of magnitude: 100 times less labor intensive.

At the age of 30, William Murdock built and tested the first primitive locomotive, a model 19 inches long by 14 inches high. He ran the steam engine automobile on a dark night along an unfrequented lane near Redruth Parish Church, scaring the “daylights” out of the local rector. However he was never able to pursue his ideas due to the obstinacy of his employers. He tackled them with a view to getting his ideas adopted as a full size B & W production model, but was strongly turned down. Not only did they oppose his idea completely, but extracted a promise from him that he should abandon it entirely. It was therefore left to Richard Trevithick, who was a lad of 13 years at the time, to pursue the idea of a self propelled vehicle. There is evidence that Trevithick was a visitor to the Murdock house, although Trevithick’s engine was of a completely different design. Murdock nevertheless kept the engine until his death, when it passed to his son John, who later sold it to Mr. Tangye of Birmingham — it now is owned by Birmingham City Council.

69. Cf. United States census reports; and Olmsted, The Cotton Kingdom.
70. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export — such production not beginning until 1789. In fact, according to page 92 of Seybert’s Statistics, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.
71. The mills at Fall River, Rhode Island would prove to possess a number of advantages over other towns engaged in the weaving business. Cargo vessels did not need to venture into the treacherous waters around Cape Cod in order to get there, and in those years before the digging of the Cape Cod Canal that was of considerable importance as the cost for coal and the cost for cotton could be lower there than in a port such as Boston for which the vessels had to push our into the treacherous weather and waters off the Cape. And, of course, the constant streams of immigrant labor (the textile industry was the absolute bottom rung of the ladder for white laborers, with turnovers of “operatives” averaging 5% per week due to the unrelentingly low wages) were accessible there as well as in venues such as Lowell. However, primarily, the advantage of Fall River was in its “weaving weather,” which is to say, its soft and misty air, in which the relative humidity averages out at 74%. Such moist air keeps down static electricity, and thus allows a higher thread tension on the looms, while promoting an even drying of the printed fabrics. Mills located in such a climate can specialize in the finer grades of light printed fabric, which sell at the highest premium.
John Fitch, trudging along a dusty road near Neshamini in Bucks County in Pennsylvania, was being passed by a horse and buggy when an apparition came before his mind’s eye: he was rolling merrily along this road in his own buggy, and yet there was no horse in front of him, nothing but open road in front of his buggy! If a sufficiently inventive man could only figure out a way to propel his buggy by “the force procured by Steam,” he could dispense with that animal and all its bother! Alas, John’s dream would have to wait, for he soon recognized that he would need to design such a buggy not only to roll along a smooth flat roadbed such as this one but also to negotiate hills, etc. Damn! Well, but on a river there are no hills, why not first learn to harness “the force procured by Steam” to drive a boat, solving the propulsion problem alone, and then later he could turn to the more elaborate problem of a land vehicle! Thus Fitch determined he would first begin to work out a design for a steam-powered boat. Assuming he would have to begin with an engine of the Newcomen stationary variety, he had the idea of making the design mobile by replacing the weights which lowered the pistons in each of the two cylinders of this engine with springs. He also schemed to convert the reciprocal motion of the pistons into the rotary motion which he needed by the use of ratchets. Before he was able to try out this design, he learned of improvements in steam engines which had been made by James Watt and rearranged his design. Fitch’s plan to connect his steam engine with the water was to have a kind of tank-tread with paddles along each side of the boat –if you can imagine this– and there is still in existence a model of his initial scheme.

An invention important to the development of the cloth industry occurred during this year. Edmund Cartwright developed a power-loom. At a factory in Papplewich, Nottinghamshire, England, a Boulton & Watt steam engine created through the partnership of Watt with Matthew Boulton began to power the cotton spinning machinery, whereas previously such machinery had been powered either by water power or by laborers (usually convicts) stepping upward on a treadmill.73

72. James Watt was at this point exceedingly well known and rewarded and was, indeed, being elected to the Royal Society of London.
    In Waldo Emerson’s “Notes” to his essay “The Conduct of Life” we find a (presumably false) attestation that:
    
    It was Watt who told King George III that he dealt in an article of which kings were said to be fond — Power.
Onerous labor would be shifting from the backs of local prison convicts — to the backs of remote plantation slaves. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.

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79. Cf. United States census reports; and Olmsted, The Cotton Kingdom.
J.P. Brissot de Warville provided an impression of Rhode Island as he encountered it.

In the earliest attempt to manufacture cotton cloth in Providence, Daniel Anthony, Andrew Dexter, and Lewis Peck constructed a spinning-jenny in a private home on the basis of an English model they found in Beverly, Massachusetts and went into partnership to make “homespun” (this machinery would be moved to the market-house chamber in Providence). They would construct also a carding-machine and a spinning-frame. Joseph Alexander, a native of Scotland, would show them how to set up a loom. They would move the spinning-frame to Pawtucket so it could operate by water-power, and sell it to Moses Brown of Providence. None of this machinery worked very well, and William Almy and Smith Brown carried on this business for Moses Brown until it was recognized to be an unprofitable arrangement.80

September 13, Sunday: Samuel Slater embarked from London for the US, carrying trade secrets of textile manufacturing he had learned from observing the operation of machines invented by Arkwright and Hargreaves.

80. Bear in mind that in early periods the Southern states of the United States of America produced no significant amount of cotton fiber for export — such production not beginning until 1789. In fact, according to page 92 of Seybert’s STATISTICS, in 1784 a small parcel of cotton that had found its way from the US to Liverpool had been refused admission to England, because it was the customs agent’s opinion that this involved some sort of subterfuge: it could not have originated in the United States.
November 18, Wednesday: Louis-Jacques-Mandé Daguerre was born.

Samuel Slater arrived in New-York.

December 2, Wednesday: In Providence and Pawtucket, Rhode Island, cotton from the slave plantations of the American South and from the slave plantations of the West Indies was being woven into cloth for resale to its growers. The operation, run by the merchant Moses Brown, was on a small scale. On this date Samuel Slater, a young man recently arrived from England after working in cotton spinning mills, applied for a job with Brown. Slater alleged an intimate knowledge of the British thread-spinning machinery: “I flatter myself that I can give the greatest satisfaction in making machinery, making as good yarn, either for stocking or twist, as any that is made in England.”

Samuel [Slater] was a stalwart, handsome, rosy-cheeked youth of twenty-one when he came to America. Moses Brown sent him to Oziel Wilkinson’s, in Pawtucket, as a suitable place for him to board. When he entered Wilkinson’s house Hannah and another of Oziel’s daughters were working in the kitchen. Seeing a stranger, girl-like, they fled to an inner room; but Hannah, with maidenly curiosity, looked through a hole in the door and was favorably impressed with the young Englishman’s appearance. Samuel saw the eyes and resolved to win them. The young people were both smitten, but the Wilkinsons were Friends and did not approve of
Hannah’s marrying a man of another faith. They proposed to send her away to school, but Samuel declared he would follow the girl to the ends of the earth if need be. The parents wisely concluded to withdraw their opposition and the lovers were allowed to marry. In the words of Slater’s biographer, Hannah was a “lodestone” that kept him in Pawtucket. Had it not been for her influence and sympathy, he might have given away to discouragement at the many difficulties he was obliged to encounter in making the new machines and running them successfully. In telling the story of Slater we must not forget the woman who assisted him in winning his great success. The machines are supposed to have been started up temporarily in October, 1790, but the first record of their work commences with December 20, 1790.

Colonel Timothy Pickering, Canandaigua lawyer Thomas Morris, the Reverend Kirkland, Horatio Jones, and Jasper Parrish negotiated with native headmen Red Jacket, Cornplanter, and Good Peter (the Indian preacher) and local tribes at New Town point (Elmira, New York). Nearly 500 Senecas encamped at Friend’s Landing on Seneca Lake. At the request of Good Peter, “Universal Friend” Jemimah Wilkinson made an appearance. Her topic was “Have We Not All One Father?” Good Peter’s sermon following her sermon, “Universal Friend” requested that his words be interpreted. Good Peter declined to provide this interpretation, commenting succinctly “if she is Christ, she knows what I said.”

Following this conference, a delegation of Seneca headmen set out to visit President George Washington at the nation’s capital, Philadelphia.

Noting “the great advantages which had resulted to Boston from the bank established there,” Moses Brown and John Brown helped a group of wealthy merchants found, and John served as the chief executive officer, and Moses served as a director of, the first bank in Rhode Island, incorporated in Providence and named the “Providence.” (During June 1865 this institution would be reorganized as a national bank and renamed the “Providence National Bank.”)

Four guys – Samuel Slater, and a woodworker, and an elderly black employee of the merchant Moses Brown, and the ironmaster David Wilkinson of Slater Mill in Pawtucket (meaning “waterfall”) near North Providence, – bankrolled by a 5th guy, said Friend Moses, and using the water power of the Blackstone River, with children working his “spinning jennies” in the production of yarn made of cotton from slave plantations, were at this point able to begin the farming out the large quantities of manufactured yarn to local women who were to work in their homes for piecework wages, weaving this yarn into cloth on consignment. The English thread-spinning technology had been duplicated entirely from Slater’s memory.
This mill would begin to operate satisfactorily as soon as they had made a correction in the slope of the carder teeth he had specified.

(Obviously, our Bill of Rights was arriving, in this former colony that had been the very last to ratify the Constitution, not one instant too soon. :-)
Water power would replace at least for the most part the brute labor that had been being provided by animal and human treadmills:

(The treadmill illustrated above was one in use for punishment at the Brixton House of Correction in 1821. Prisoners walked the treadmill for ten minutes and then had a five minute breather. Talking was forbidden. Although the treadmill at Coldbath Fields prison drove a flour-mill, in other prisons the power produced was not utilized. Of course, in factories the treadmill was not for punishment and the power was always utilized.)
Mr. Samuel Slater was able to get his hands on eight children between the ages of 7 and 12 as his first work crew in his factory at Slater Mills, to tend his water-powered carding and spinning machines — machines which were utterly lacking in any safety guards over their power belts and pulleys. Clearly, the only families which would put their children to this sort of dangerous labor were families which were desperate to get food on their table and shelter over their heads. Get this, such children might otherwise be destitute and victimizable! Slater made no agreements that these children, who should have been in school, would be trained as apprentices in any craft: they were not indentured to learn a lifetime skill, but were to be mere low-wage machine fodder without a future, in his dark Satanic mill. You can visit this mill today. It’s right off the freeway but now it is deceptively lovely and lonely and silent there. There is nothing whatever about the place which might cause child abuse to spring to one’s mind.

Get ready, here comes the unholy alliance of “the lords of the lash and the lords of the loom”!

By 1810 the United States would boast 87 such cotton mills, able to provide employment for 4,000 workers, some 3,500 of whom would be women and children who might otherwise be destitute and victimizable.81

We owe so much to technology and the profit motive! (Don’t let Adam Smith’s invisible hand slap you in the face. :-)

White imitation slaves are infinitely superior to black real ones, because there’s never any agitation to emancipate the imitation white ones — if they get old or sick or get caught in the machinery and injure themselves, you can just tell them to get lost!

By 1796 there would be three forges, a tanning mill, three snuff mills, an oil mill, a clothiers works, three fulling mills and two nail mills, at this falls on the Pawtucket River, all being run by water power rather than muscle power. Human workers were being allowed to use their brains rather than their brawn — isn’t that superior?

Eli Whitney developed an improved cotton gin that was capable of processing the short staple upland cotton that had been being produced in the American South since about 1789. This was the first improvement to the cotton gin in 2,000 years. Cotton would rescue slavery from oblivion by replacing the naval stores and indigo trade lost during the revolution, and advance the inevitable war between the Northern and Southern States by a generation.

81. As Friend Moses Brown, Rhode Island’s premiere industrialist, had pointed out,

“As the manufactory of the mill yarn is done by children from 8 to 14 years old it is a near total saving of labor to the country.”
Cotton fiber had been being produced in the American south since about 1789. Eli Whitney’s cotton gin\(^\text{82}\) would at this point be beginning to increase US planting of continental short-staple cotton: a labor-saving device in effect producing an increased demand for slave labor. US production of such cotton would rise from 140,000 pounds in 1791 to 35 million pounds in 1800 as the efficiency of the Whitney cotton gin led to rapid growth of cotton planting in the South and a boom in northern and English cotton mills.

During this year importation of new slaves into Canada was being interdicted, and for remarkably similar reasons the intrusion of free blacks into the state of Virginia was being interdicted. The growing and processing of cotton (at this point a crop that as almost unheard of in the USA) would be making slavery profitable and thus increasing the worth of a black (or partly black) US field slave to the range of $1,000.00 and increased the market value of an apparently healthy and apparently well-formed newly bred black (or partly black) infant to the range of $100.00.

On the following screen is a depiction of just how this new law actually worked in practice, in permitting what amounted to enslavement raids from the South, setting up what might be termed a reverse underground railroad to deprive free Northern blacks of their liberty for a profit and as a business, according to James W. Loewen’s LIES ACROSS THE LANDSCAPE: WHAT OUR HISTORIC MARKERS AND MEMORIALS GET WRONG:

[following screen]

\(82\) According to some 19th-Century accounts, Eli was the farm mechanic of one Catherine Greene, and she had her hand in the construction of the cotton gin attributed to him. To what extent, we simply don’t know, because in that century when a female had a mechanical idea, it was common to donate the idea to a male, even, in the absence of a convenient male, avoiding censure by attributing the idea to spirits. At any rate, the machine was not as novel as has been made out, for there had been for thousands of years devices for the cleaning of the high quality fibers of long-staple sea-island cotton, and all that had been done here had been to produce a mechanism that would do an acceptable job with lower quality short staple fibers as well.
It is impossible to know how many African Americans were kidnapped into bondage within the United States. Carol Wilson, the principle historian of the illicit trade, tells of kidnappings as far north as New Hampshire and as far south as Louisiana. Greed was the motive, of course. In the 1850s, ordinary field hands brought $1,000 to $2,000, children less, skilled artisans more. To put this amount in perspective, consider that in 1844 Abraham Lincoln bought his home in Springfield IL for $1,200. Today in many locations it would sell for at least $200,000.

Kidnapping wasn't hard. The lives of free African Americans were legally precarious, North as well as South. In the South, blacks were presumed slaves unless they could prove otherwise, and kidnap victims were hardly able to preserve their papers. In most states, blacks could not testify against whites, so the victims and their families and friends could not mobilize the legal process on their behalf. The Fugitive Slave Law of 1793 permitted slaveowners or their agents to go into free states, seize African Americans who had escaped from them, and take them South without due process of law. Bystanders could hardly dispute the whites' claim unless they knew the African Americans personally, so once they had removed their victims from the immediate neighborhood, the kidnappers had an easy time of it. White acquaintances who knew that a given black person had been free were not likely to travel to distant states to testify on his or her behalf; indeed, they were not likely to know that the kidnapping had occurred or where the victim had ended up. Purchasers, meanwhile, were reluctant to believe that their newly bought property was defective in title.

Any African American who got into a scrape with the law was liable to get sold into slavery if the sheriff or police officer was corrupt. Irish Americans in New York City, Philadelphia, and Maryland, trying to evict African Americans from jobs on the docks, shanghaied blacks and sold them to Southern agents. Black sailors, especially from the West Indies, were favorite targets, because they often had no white acquaintance to vouch for them, hence had no resources once their papers were ripped up. According to historian Jeffrey Bolster, more than 200 were kidnapped into slavery in one year. Children were also particularly vulnerable, since they were easier to steal and less articulate in their own behalf.

To be sure, people also stole enslaved African Americans for resale. Slave stealing was not considered kidnapping, however, even when the victim was a child, because the law considered slaves property, not people. Ironically, slave stealing was also less common than kidnapping, because an owner—a powerful white person with legal rights—was likely to come looking for his stolen slave. Thus it was much less risky to kidnap a free black than to seize a slave.
March 14, Friday: Eli Whitney patented a machine for removing the seeds from cotton balls (cotton gin). There has since been so much mythology built around the supposed uniqueness of this moment, that a considerable amount of debunking analysis has been required:


Reviewed for H-Southern-Industry by Shepherd W. McKinley, Department of History, University of North Carolina at Charlotte.

**Whitney and “The First Cotton Gin”**

To grace the cover of her book’s paperback edition, Angela Lakwete chose William L. Sheppard’s illustration, “The First Cotton Gin,” first published in Harper’s Weekly in 1869. In it, Sheppard drew planters evaluating ginned cotton and slaves operating a roller gin, a forerunner to Whitney’s famous invention. The image, Lakwete argues, gets to the heart of the matter: the question of Eli Whitney’s paternity of that most troublesome of all American inventions, the cotton gin, as well as the role southerners of both races played in its invention. Sheppard sought to dilute what historians since the early nineteenth century had promulgated, the myth—still alive and well in most textbooks—that no other gin existed before Whitney’s eureka moment in 1794. While on a visit to Georgia, the myth continues, Whitney (full of Yankee ingenuity but new to the cotton industry) came to the rescue of black and white southerners (a head-scratching bunch of dimwits who could only think to finger gin the cotton) by solving the problem of quickly extricating seeds from cotton without (completely) destroying the fiber. By identifying the northern mythmakers and the southern debunkers, as well as providing a painstaking explanation of the evolution of the ancient invention, Lakwete properly exposes cotton gins (not just Whitney’s) as cultural artifacts with ample historical baggage. In doing so, she begins a long overdue revision of what textbooks and history teachers have mistakenly preached regarding Whitney, cotton gins, and the lack of southern ingenuity. Of course, change takes time. In the decade since Lakwete’s scholarship forced this professor to revise his classroom comments about gins, rare is the student who does not revert reflexively, on exams and papers, to the Whitney myth.

A graduate of the Hagley Program in the History of Industrialization at the University of Delaware and now an associate professor at Auburn University, Lakwete organizes INVENTING THE COTTON GIN chronologically through the first five chapters, and thematically in the last three. Exploding the Whitney myth in the book’s opening sentence, she introduces readers to cotton varieties and early cotton gins in the first
chapter. So much for a surprise ending. Global in scope and research, this chapter also features the emergence of single roller gin technology during the first century C.E. and its dispersion throughout Asia, Africa, and North America. Double roller gins appeared about a dozen centuries later in India and China, but did not dislodge the single roller. Lakwete completes this background chapter by illustrating Great Britain’s rise in the world textile trade.

In chapter 2, Lakwete narrows the focus to the Americas and advances the timeframe to the eve of Whitney’s invention. Planters in the Caribbean dominated cotton production early in the eighteenth century, but mainland producers reentered the trade in the 1770s when the British mechanized cotton spinning. Lakwete describes American inventions such as the fully foot-powered gin, the barrel gin, and Joseph Eve’s self-feeding gin as conservative modernizations of the roller gin, “faithful to the pinch principle” and successful in preserving the quality of the cotton fiber (p. 46). Contrary to popular belief, ginning was not a bottleneck for the American industry before Whitney. Lakwete also provides interesting background on the policy debates of 1787 between Tench Coxe, the “father of the American cotton industry,” and Thomas Jefferson over the role of government in economic development (p. 36).

Reinforcing her thesis that Whitney was just one of several important inventors of the gin, Lakwete presents his story in detail in chapter 3. Covering the years 1790-1810, she argues that Whitney’s unique contribution was to patent a “new ginning principle” and a “new kind of gin,” the wire-toothed gin (p. 47). The new machine pulled the short staple fiber from the seed more quickly than the roller gin’s pinching action, enhancing quantity over quality and forcing textile and cotton producers to reevaluate their priorities. Modifications to the wire-toothed gin by other inventors led to the saw gin and a series of lawsuits. Lakwete demonstrates that Phineas Miller, Whitney’s partner, and William Johnson, a judge in one of the many patent lawsuits, helped invent the Whitney myth by “collapsing” two centuries of successful roller ginning into Whitney’s invention, and thereby created THE moment of southern economic discontinuity (p. 71). Lakwete begs to differ. The saw gin represented a different form of gin from what had come before, but the change was not, as has been widely proclaimed, similar to the jump from horse and buggy to automobile.

Planters and gin makers did not abandon the roller gin immediately. In chapter 4, Lakwete depicts the thirty-year transition from the roller to saw gin as more evolutionary than revolutionary. While the roller gin represented “a colonial past” and the saw gin the modernity championed by Tench Coxe, Americans were relatively slow — slower than textbooks portray — to fully embrace the saw gin technology (p. 72). The roller gin remained a strong competitor until the late 1820s, but saw gin makers hastened its demise by aggressively advertising and developing a strong manufacturing infrastructure. By not keeping up, roller gin makers found their products pushed out of the rapidly expanding short-staple market and restricted to the limited market for long-staple cotton. Textile manufacturers allowed themselves to be seduced by the saw gin’s edge in
Lakwete spends most of the chapter discussing the development of new communities of cotton gin makers in Georgia, Mississippi, South Carolina, and Alabama. The transition to saw gins ended with the creation of large saw gin manufacturing companies, two in Bridgewater, Massachusetts and one in Triana, Alabama. By demonstrating the vitality of innovation in the South, as well as the North, Lakwete explores a related set of recurring themes in the next few chapters: the power and breadth of southern industrialization and the collaboration of northern and southern manufacturers and consumers.

Not surprisingly, sectionalism takes center stage in chapter 5, which covers the final decades of the antebellum era to the end of the Civil War. Lakwete describes this period within the saw gin industry as "a case study of southern industrialization" due to the developing manufacturing industry that incorporated the region's agriculture (p. 97). Although gin makers in Massachusetts became more prominent, and northerners directed the South's biggest factories, southern manufacturers were important in the industry, and southerners were not dependent on the North for this most vital machine. Southern mechanics and manufacturers congregated in county seats, forming "zones of industrialization" where innovation thrived in gin manufacture, and later, in firearms production for the Confederacy (p. 97).

Southern gin makers, such as Daniel Pratt, Samuel Griswold, and T.G. Atwood, employed free blacks and slaves who contributed to the "innovative industry that blurred regional and racial distinctions as it reinforced them" (p. 98). Lakwete discusses the differences between northern and southern firms, and wrestles with the question of what role enslaved African Americans played in the industry.

Fluctuations in cotton prices during much of the antebellum period exacerbated the tensions between quality and quantity in the saw gin industry, and pressured gin makers to innovate. Lakwete explains in chapter 6 that low prices made planters and British textile manufacturers demand longer and cleaner fiber with no decrease in production. Caught in the middle, gin makers sought to perfect their machines with incremental, conservative changes, usually in the form of "fancy attachments" that were often sectionally distinct (p. 122). Price shocks, such as the panic of 1837, spurred inventors to improve gin speed as well as fiber length and cleanliness. By the 1850s, however, quantity had triumphed over quality and became synonymous, in the minds of planters, with perfection.

To paraphrase Monty Python, the roller gin was not dead yet. Roller gin makers tried to innovate and modernize in the face of the saw gin's continuing dominance during the 1820-1870 period. A group of predominantly northern gin manufacturers attempted to increase roller gin output for the long-staple cotton market, but failed to maintain quality standards. Other gin makers, located in the South but with "northern roots," created the McCarthy and cylinder gins in an unsuccessful attempt to compete with saw gins in the short-staple market (p. 148). Lakwete's analysis in chapter 7 sheds light upon the cultures of short- and long-cotton planters. Many long-staple planters continued to use foot and EVE gins until adopting the
The final chapter, "Machine and Myth," returns to intriguing themes introduced in the preface and mentioned in other chapters. Lakwete argues that the cotton gin was "a site of invention and innovation and a symbol of regional prosperity," but as the Whitney myth proliferated, the gin "degenerated into a signifier of southern failure" (p. 177). "The narrative begins," she continues, "with inept planters and sleepy finger-ginning slaves and ends with battlefield dead. It celebrates Yankee ingenuity in invention and victory and insinuates southern incompetence in passivity and defeat" (pp. 191-192).

Accounts of the inventor’s life, including a particularly influential one by Denison Olmstead in 1832, fortified evolving stereotypes of "ingenious" northerners and "incompetent" southerners (p. 180). Historians, beginning with James Ford Rhodes in 1893, gave Whitney’s evil gin agency and blamed it for the South’s cotton economy, the reinvigoration of slavery after 1800, and the sectional tensions that led to the Civil War. New South boosters struck back, claiming that the saw gin represented the dead Old South, and the McCarthy gin represented the modern New South, but the failure story, Lakwete documents, has survived to the twenty-first century.

By following the advice of her mentor, George Basalla, to use "things in history," Lakwete successfully overturns the story of southern failure by recovering the history of roller gins and southern gins shops (p. xi). Planters, machinists, and African Americans (free and enslaved) were skilled innovators and talented marketers, resulting in technological advances and financial success. Whitney’s invention was an important advance in cotton gin history, but many southerners before and after Whitney played vital roles in the development of the machine. In a direct writing style, Lakwete presents in-depth and wide-ranging research with helpful summaries at the beginning and end of each chapter. She painstakingly explains complicated technological issues, including the nuts and bolts of each machine, while providing the reader with context. This is an important book, and now in paperback form, a good candidate for graduate level courses. As is evident in this reviewer’s attempt to summarize her chapters, Lakwete had her work cut out for her in trying to explain this complex industry and its even more complex machines.

While INVENTING THE COTTON GIN serves as an exciting revision and raises even more exciting questions, Lakwete’s detailed exploration of cotton ginning makes for slow reading for those not technologically inclined. It is understandable that Lakwete should demonstrate the differences between Whitney’s machine and its predecessors and successors, and it is helpful to reveal the evolutions in production, marketing, and the needs of planters. But this reviewer would have preferred less detail and more summary, guidance, and context. Lakwete documents many cases of, and raises tantalizing questions about, southern industrialization, but readers of H-Southern-Industry will find themselves wanting more. Specifically, she declares in the preface that the "innovative southern gin industry belies constructions of failure read back from 1865. Instead, it forces a reconciliation of an industrializing, modernizing, and slave
labor-based South” (p. ix). While Lakwete documents such innovation and returns to this theme occasionally, readers may wish for a fuller exploration of context — the cotton gin as “the emblem of the cotton South,” the historiography of industrialization of the antebellum South, and an understanding of the sense of industrial inferiority among southerners (p. 176). This reader would have also enjoyed more discussion about the relationships of the cotton gin to race in the South and Coxe’s new nationalism, and of zones and communities of gin makers to southern industrialization.

Lakwete’s INVENTING THE COTTON GIN is an important addition to the growing list of works on southern industrialization. Her argument that continuity, not the myth of discontinuity, marked the history of cotton gins, is well documented and has important implications for understanding the antebellum and postbellum periods. Whitney’s gin was not a major turning point in American history, or even southern history, but part of a long tradition of innovation and collaboration; innovation by northern and southern inventors and machinists, and collaboration between inventors and planters, blacks and whites, slaves and masters. As with other good history books, it challenges what we think we knew, and sends us searching for more clues.

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The cotton gin was producing a fibre, cotton, cheaper than hemp.

Britain was purchasing 90% of its maritime hemp products from Russia.
In Georgia in this year, additional restraints were found to be necessary to prevent the education of slaves:

That assemblies of slaves, free negroes, mulattoes and mestizos, whether composed of all or any of such description of persons, or of all or any of the same and of a proportion of white persons, met together for the purpose of mental instruction in a confined or secret place, &c. &c., is (are) declared to be an unlawful meeting; and magistrates, &c. &c., are hereby required, &c., to enter into such confined places, &c. &c., to break doors, &c., if resisted, and to disperse such slaves, free negroes, &c.&c.; and the officers dispersing such unlawful assemblies may inflict such corporal punishment, not exceeding twenty lashes, upon such slaves, free negroes, &c., as they may judge necessary, for deterring them from the like unlawful assemblage in future.

— BREVARD’S DIGEST, 254

The market value of an enslaved human being in the US, which had fallen to half of what it had been in 1775, was beginning at this point to rebound. From $100, it had fallen to a low of $50 on average. Over the next half-century, under the influence of the large-scale specialist cotton plantation, the market value of an enslaved human being in the US would increase by an order of magnitude, from $50 to $500, and then go on increasing until it had reached in 1850 almost another order of magnitude higher than what it had been at its previous peak in 1775. That is, a slave had cost a US citizen about $100 in 1775 and in constant dollars would cost $800-$1,000 in 1850. The effect of the 1808 ban on the import of fresh slaves from Africa had been to increase the value of slaves bred at home. Specialist breeding plantations had sprung up, which by what will politely be termed Draconian measures were able to increase the fecundity of slave women from 10-15% per year to 25-40% per year, and the primary product of these breeding plantations was not bales of cotton lying on the dock but young people standing on the block. Why was it impossible to free the slaves by purchasing them, as had been done in England? Because by the period in which this was being argued by Waldo Emerson and others, this would have cost over $2,000,000,000.00, an amount equal to the entire expenditures of our federal government over an entire decade

South Carolina would enact a law in this year that required that any slaves who were manumitted possess, or receive from their manumitting masters, “the capacity... to function in a free society...” The goal was to end such abuses as the “freeing” of the aged, the infirm, and those considered by the slavemaster to be useless due to bad or depraved character. After the 1831 Turner rebellion, most southern states would be passing such laws restricting (or prohibiting) manumission. By the 1850s only Delaware, Missouri, and Arkansas would be allowing masters to free slaves without requiring their departure from the state.
An attempt was made to manufacture paper from straw. The firm attempting this would go bankrupt.

The 1st cotton carding machine in Middlesex County was used by Moses Hale, at East Chelmsford (now in Lowell MA).

83. This fact has been indignantly and hotly challenged. On this there is, however, scant room for debate. Those who challenge it seem to be angry deniers with their heads up their collective asses. The abolitionists had it exactly right that selling slaves out of states like Virginia into states like Louisiana was essential to the sustained profitability and viability of slavery in border states. Hence the term “breeding state,” which status Virginia’s leaders in the 1832 slavery debate made no attempt whatever to deny. The white slaveholders themselves regularly referred to dark enslaved women of child-bearing age as “breeding wenches.” A slave woman’s reproductive potential was forthrightly calculated as part of her retail worth and slaveholders generally regarded their investment in new generations of children as a capital investment. No legal restrictions whatever were placed on selling children from parents, except in Louisiana where the Code Noire attempted to intercept the selling of children under the age of 10 away from their mothers, and where in 1829 it was made illegal to import a slave child under the age of 10 without importing its mother along with it. We can witness the reproductive value of slave women by contrasting the hiring price for a slave woman with her purchase price. (The hiring rate would represent a woman’s productive labor only, because the person hiring her services would not come to own any child she would produce during her period of hire, while her higher selling price would include her reproductive potential as well as her labor.) In Virginia in 1860, a slave female’s average annual hiring rate was $46, about 44% of a slave male’s $105. By way of contrast, a woman’s average 1859 selling price of $1,275-$1,325 was almost 94% of a man’s, of $1,350-$1,425. Consider the following document in the probate records of Vicksburg MI, a document which was created by the court during a suit over control of an estate (Isaac Robert vs. Benjamin L.C. Wailes, Guardian of the Heirs of E.H. Covington dec’d. November 1839, Warren County Courthouse). The issue before this court was whether the administrator was doing all he could to increase the value of the estate on behalf of its minor heirs:

“Alexander Covington [the current administrator], sworn, says he is a planter, resides near the place of E.H. Covington [the deceased] and has been well acquainted with the plantation of E.H. Covington for nine years and with the negroes for twenty years, that there about 30 working hands on the place that the land is extremely broken has been in cultivation for 12 or 13 years and part of it is very poor, that the hollows are not susceptible of cultivation, that an average of 5 bales to the hand with a sufficiency of corn would, according to his opinion and management be a good crop, that his policy is not to make large crops but to raise young negroes, that that was the policy pursued by E.H. Covington in his lifetime, and has been pursued by Mr. Howell [the overseer] in his management, that it would be more to the advantage of minors having such an estate as the one managed by Mr. Howell to raise young negroes than to force the production of large crops.”

Witnesses for both sides in the dispute attested to the success of the defendant’s “breeding” business. Success was estimated in terms of the number of infants. It was achieved by feeding the breeding females enough to keep them healthy, by encouraging them to “breed freely,” and by only forcing the breeders to work half days — not merely while pregnant but also while in the process of becoming pregnant.
A Week: Already, as appears from the records, "At a General Court held at Boston in New England, the 7th of the first month, 1643-4." — "Wassamequin, Nasheunon, Kutchamaquin, Massaconomet, and Squaw Sachem, did voluntarily submit themselves" to the English; and among other things did “promise to be willing from time to time to be instructed in the knowledge of God.” Being asked “Not to do any unnecessary work on the Sabbath day, especially within the gates of Christian towns,” they answered, “It is easy to them; they have not much to do on any day, and they can well take their rest on that day.” — “So,” says Winthrop, in his Journal, “we causing them to understand the articles, and all the ten commandments of God, and they freely assenting to all, they were solemnly received, and then presented the Court with twenty-six fathom more of wampom; and the Court gave each of them a coat of two yards of cloth, and their dinner; and to them and their men, every of them, a cup of sack at their departure; so they took leave and went away.” What journeyings on foot and on horseback through the wilderness, to preach the Gospel to these minks and muskrats! who first, no doubt, listened with their red ears out of a natural hospitality and courtesy, and afterward from curiosity or even interest, till at length there were “praying Indians,” and, as the General Court wrote to Cromwell, the “work is brought to this perfection, that some of the Indians themselves can pray and prophesy in a comfortable manner.” It was in fact an old battle and hunting ground through which we had been floating, the ancient dwelling-place of a race of hunters and warriors. Their weirs of stone, their arrowheads and hatchets, their pestles, and the mortars in which they pounded Indian corn before the white man had tasted it, lay concealed in the mud of the river bottom. Tradition still points out the spots where they took fish in the greatest numbers, by such arts as they possessed. It is a rapid story the historian will have to put together.

Oliver Cromwell

85. Legally, there was a distinction between a slaveowner and a slaveholder. The owner of a slave might rent the custody and use of that slave out for a year, in which case the distinction would arise and be a meaningful one in law, since the other party to such a transaction would be the holder but not the owner. However, in this Kouroo database, I will ordinarily be deploying the term “slaveholder” as the normative term, as we are no longer all that concerned with the making of such fine economic distinctions but are, rather, concerned almost exclusively with the human issues involved in the enslavement of other human beings. I use the term “slaveholder” in preference to “slaveowner” not only because no human being can really own another human being but also because it is important that slavery never be defined as the legal ownership of one person by another — in fact not only had human slavery existed before the first such legislation but also it has continued long since we abolished all legal deployment of the term “slave.”
Cotton passed tobacco for the first time as the leading US export crop.

At the plant in Soho, Birmingham, England the foundry interior was entirely illuminated by gas. Other places nearby, such as the Phillips and Lee cotton mill, began to use gas lighting. Soon afterwards Boulton & Watt began to sell lighting and heating equipment and William Murdock became a partner in the business. It would not be long before all large factories used such gas lighting.

Henry Peter Brougham’s *AN INQUIRY INTO THE COLONIAL POLICY OF THE EUROPEAN POWERS*, an argument against international slave trade. Although the book would not sell well, he would be able to relocate from Edinburgh to London and become a bencher at Lincoln’s Inn.

In about this year, according to Robert Sutcliff’s *TRAVELS IN NORTH AMERICA* (page 219) two negreros were seized and brought to Philadelphia, where the vessels were condemned and the slaves from their cargoes were put out to work as apprentices.

An invention important to the development of the cloth industry occurred during this year and the following one. Radcliffe and Johnson developed a dressing-machine. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.

W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances."
This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances.87 The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860.88 Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system.

The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8½ d. From this time until 1845 the price steadily fell, until in the latter year it reached 4 d.; the only exception to this fall was in the years 1832-1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11 d.

87. A list of these inventions most graphically illustrates this advance: —
1748, Lewis Paul, carding-machine.
1760, Robert Kay, drop-box.
1772, James Lees, improvements on carding-machine.
1775, Richard Arkwright, series of combinations.
1779, Samuel Compton, mule.
1785, Edmund Cartwright, power-loom.
1803-4, Radcliffe and Johnson, dressing-machine.
1817, Roberts, fly-frame.
1818, William Eaton, self-acting frame.
1825-30, Roberts, improvements on mule.
The demand for cotton goods soon outran a crop which McCullough had pronounced "prodigious," and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860. The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton "corner;" by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d'état, which failed in the war of 1861-1865.

John Brown of Framingham MA, son of the Colonel Roger Brown who was proprietor of the fulling mill on the Assabet River, entered into a partnership with a cousin and built, on the Assabet above Concord, the 1st cotton mill in the Commonwealth of Massachusetts. The mill was a wooden building but it was five stories high and a hundred feet long and had a tower facing the road. Worker tenements began to line the south shore of the Assabet above Derby’s Bridge. For the use of these millhands, Brown began the 1st library in the area.

In Concord, Nathan Wood was a Selectman.

This was the state of Concord’s finances:

In consequence of having to maintain eight bridges, and the liberal appropriations for schools and other objects, the taxes in Concord are supposed to be higher, in proportion to its wealth, than in many towns, amounting to about $3 on every

89. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d.
90. From United States census reports.
91. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
inhabitant. In 1803, the roads and bridges, independent of a highway tax of $1000, cost $1,244; in 1805, $967; in 1807, $1,290; and on an average, for the last 40 years, about one eighth of all the town expenses. The following table will exhibit the appropriations for several periods since.

<table>
<thead>
<tr>
<th>Year</th>
<th>State Tax</th>
<th>County Tax</th>
<th>Minister</th>
<th>Incidental</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1785</td>
<td>£711.6s.4d</td>
<td>£25.3s.3d</td>
<td>£100.10s.9d</td>
<td>£748.8s.1d</td>
<td>£1,585.8s.5d</td>
</tr>
<tr>
<td>1790</td>
<td>£128.9s.4d</td>
<td>£32.16s.6d</td>
<td>£113.19s.6d</td>
<td>£596.2s.11d</td>
<td>£871.18s.3d</td>
</tr>
<tr>
<td>1795</td>
<td>$613.33</td>
<td>$233.16</td>
<td>$646.66</td>
<td>$2,327.15</td>
<td>$3,820.31</td>
</tr>
<tr>
<td>1800</td>
<td>$611.33</td>
<td>$161.56</td>
<td>$567.26</td>
<td>$2,763.52</td>
<td>$4,103.78</td>
</tr>
<tr>
<td>1810</td>
<td>$662.14</td>
<td>$398.92</td>
<td>$633.05</td>
<td>$3,010.47</td>
<td>$4,704.58</td>
</tr>
<tr>
<td>1820</td>
<td>$568.94</td>
<td>$331.13</td>
<td>$794.17</td>
<td>$4,243.92</td>
<td>$5,938.16</td>
</tr>
<tr>
<td>1830</td>
<td>$222.00</td>
<td>$417.17</td>
<td>$709.00</td>
<td>$4,072.01</td>
<td>$4,781.01</td>
</tr>
</tbody>
</table>

The amount of debts due from the town, in 1825, was $3,284.04, and in 1831, $5,288.65.92

EMPLOYMENT.—Agriculture is the greatest source of wealth to the town. Manufactures are next in rank. Three farmers in the town own about 1000 sheep, the value of whose wool was estimated, in 1831, at $1500. There were raised 884,000 teasles. The oldest cotton-mill now [1835] in this state was commenced in this town in 1805, and the manufacture of cotton soon after began by Messrs. Hartwell and Brown, and has since been carried on by Ephraim H. Bellows through the various fluctuations of the business. The proprietors were incorporated in 1832. The mill contained 1100 spindles, 20 looms, employs 9 men, 3 boys, and 30 girls, works 50,000 lbs. of cotton, and makes 188,000 yards of cloth annually, valued at $17,900. David Loring commenced the manufacture of lead pipes in 1819, and of sheet lead in 1831. He employs 6 men, and upwards of 300,000 lbs. of lead are annually wrought, valued, when ready for sale, at about 20,000. In the extensive establishments for the manufacture of chaises, harness, and carriages, owned by Colonel William Whiting and the Messrs. Robbins, the value of the articles manufactured last year was estimated at $14,000. The smithery, where the iron work was made, used upwards of 100,000 lbs. of iron, and 4,000 of steel, in 1831. Henry H. Merrill, the proprietor, erected, in 1832, a steam-engine, and has otherwise enlarged his works. Elijah Wood commenced the manufacture of boots and shoes in 1812 and makes, annually, about $6,000 worth. Nehemiah Ball began the same business in 1832. From 3000 to 6000 gross black lead pencils and points are annually made in town. William Monroe commenced

92. Lemuel Shattuck’s 1835 A HISTORY OF THE TOWN OF CONCORD;... Boston MA: Russell, Odiorne, and Company; Concord MA: John Stacy, 1835
(On or about November 11, 1837 Henry David Thoreau would indicate a familiarity with the contents of at least pages 2-3 and 6-9 of this historical study. On July 16, 1859 he would correct a date mistake buried in the body of the text.)
the manufacture of these in 1812; and his method of making them
he regards as his own invention, having, he informs me, had no
instruction from anyone in relation to the subject. "The lead
for the first pencil was ground with the head of a hammer, was
mixed in a common spoon, and the pencil sold to Benjamin Adams
in Boston." In 1814 he made 1212 gross, which he sold for $5,946.
He has since made about 35,000 gross; in some years 4,000 gross
of pencils, and 1,000 of points. John Thoreau and others in the
town have also carried on the business extensively, but the
profits are now [1835] very much reduced. Mr. Thoreau also makes
red lead pencils and glass paper. There were also made, in 1831,
50 brass time-pieces, 1,300 hats, 562 dozen bellows, 100 guns,
300,000 bricks, 500 barrels, 20,000 lbs. bar soap, 5,000 nail-
kegs, and cabinet ware, the value of which was estimated at
$14,860. This is what is generally termed wholesale business,
and includes very little custom work; the articles manufactured
being principally sold abroad. There are 6 warehouses and
stores; one bookstore and bindery; two saw-mills; and two grist-
mills, at which it was estimated that 12,000 bushels of grain
were ground the last year [1834?]. The manufacturing and
mechanical business of the town is increasing, and promises to
be a great source of wealth.93

The Acton Light Infantry was organized in 1805, and then
consisted of 41 members including officers. The following
gentlemen have since successively commanded this company. Paul
Brooks, Simon Hosmer, Abijah Hayward, Silas Jones, James Jones,
Aaron Hayward, Jonathan Hosmer, John Fletcher, John Handley,
Jr., Simon Davis, Abel Furbish, George W. Tuttle, and Thomas
Brown. This and a standing company compose the militia of the
town [of Acton].94

Samuel Jones, Esq., resided here [in Acton], as an Attorney, in
1805 and 1806, but left the town [of Acton], and died at the
south.95

These were the appropriations made by the town of Lincoln:96

<table>
<thead>
<tr>
<th>Date</th>
<th>1755.</th>
<th>1765.</th>
<th>1775.</th>
<th>1785.</th>
<th>1795.</th>
<th>1805.</th>
<th>1815.</th>
<th>1825.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister</td>
<td>£56</td>
<td>£69(^2/3)</td>
<td>£70(^2/3)</td>
<td>£85</td>
<td>£105</td>
<td>$—</td>
<td>$600</td>
<td>$460.</td>
</tr>
<tr>
<td>Schools</td>
<td>13(^1/2)</td>
<td>20</td>
<td>13(^1/2)</td>
<td>50</td>
<td>85</td>
<td>—</td>
<td>480</td>
<td>520.</td>
</tr>
<tr>
<td>Highways</td>
<td>25</td>
<td>50</td>
<td>40</td>
<td>80</td>
<td>80</td>
<td>$450</td>
<td>600</td>
<td>400.</td>
</tr>
<tr>
<td>Incidental charges</td>
<td>24(^1/2)</td>
<td>19</td>
<td>37</td>
<td>250</td>
<td>125</td>
<td>830</td>
<td>1450</td>
<td>500.</td>
</tr>
</tbody>
</table>

93. Lemuel Shattuck’s 1835 A HISTORY OF THE TOWN OF CONCORD;... Boston MA: Russell, Odiorne,
and Company; Concord MA: John Stacy, 1835
(On or about November 11, 1837 Henry Thoreau would indicate a familiarity
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buried in the body of the text.)

94. Ibid.

95. Ibid.
In Rhode Island, Henry Smith was Acting Governor. The Douglas Turnpike, now Route 7, was chartered to run from Providence to Smithfield. Rowland Hazard installed a carding machine at his fulling mill on the Saugatucket River in Peace Dale in South Kingstown (this marked the beginning of the Narragansett Cotton Manufacturing Company).

A new community to be known as “Slatersville” was developed by the partnership of Almy and Brown at Buffam’s Mills on the Branch River two miles upstream from the Blackstone River. John Slater purchased the land from the Buffams for $6,035 and enlarged the mill pond, adding to the mill, store, and worker housing.

At this point Isaac Wilbour was Rhode Island’s Lieutenant Governor, Between this year and 1826, the new-model industrious community known as “Slatersville” would be being developed.

At the original Slatersville Mill, which would be not only the very largest but also the most progressive textile mill in our nation, Walton Felch would begin his career as a master machinist. Promoted to management, Felch would incorporate his experiences as the superintendent of this mill into a didactic poem, The MANUFACTURER’S POCKET-PIECE; OR THE COTTON MILL MORALIZED. As his subtitle suggests, Superintendent Felch would come to regard his cotton mill as an allegory of the moral life. In New Lanark, Scotland the entrepreneur Robert Owen had turned his factory into a utopian community founded on socialist principles, and in New England the mill of Francis Cabot Lowell would become a symbol of efficient and benevolent industrialism. Pilgrims would come from all over to see and study such factories; one such reformer, Henry R. Colman (October 9, 1800-February 7, 1895), would report that the “moral spectacle here presented is in itself beautiful and sublime.” In such a cotton mill “each part retains its place, performs its duty,” modeling the proper function of human civilization at large. In 1976, in CIVILIZING THE MACHINE: TECHNOLOGY AND REPUBLICAN VALUES IN AMERICA, 1776-1900 (Hill & Wang), Professor John F. Kasson of the Department of History at the University of North Carolina at Chapel Hill would explain that the “discipline of the factory, Felch suggested, might provide just the salutary influence to keep republican spirits from running to excess. He chose a cotton mill as an illustration and carefully traced the moral lessons of control taught by each of the various elements; then Felch solemnly gestured to the whole and instructed his countrymen:

Remark the moral order reigning here,
How every part observes its destined sphere;
Or, if disorder enter the machine,
A sweeping discord interrupts the scene!
Learn hence, whatever line of life you trace,

96. Ibid.
In pious awe your proper sphere to grace.”

The factory, Professor Kasson would argue, was becoming the symbol of a new kind of social order in which each citizen was to function in her appointed place in the great humming machine of the global economy. His insight would be that what Henry R. Colman and Walton Felch were describing was “essentially an industrial version of the Puritan doctrine of the calling, by which each person pursued his appointed vocation in the place which God had ordained. Factory discipline would provide social discipline as well.”
By this point there were over 100 mills along the Blackstone River outside Providence similar to the cotton mill set up in 1791 by Samuel Slater and Friend Moses Brown. The amount of money the Rhode Island Friends had set aside for Quaker education had at this point grown to nearly $8,000.

Henry A. Howland of Providence was keeping careful track of his life.

97. That sounds just hunky-dory, but on the downside, these alterations being made in the Blackstone River were, as one might imagine, destroying its migrating and spawning fish. (“You can never do just one thing.”)
There were 17 cotton-mills in the vicinity of Providence, and 5 more were under construction. There were 8 in nearby Rhode Island towns, and 5 more were under construction.

At the Hazard fulling mill on the Saugatucket River in Peace Dale in South Kingstown, Rhode Island, a power loom went into operation. Later, the Narragansett Cotton Manufacturing Company would allege that this was the 1st power loom to be operated successfully in America.

In Waltham, the Boston Manufacturing Company mill was built (this is now the Francis Cabot Lowell housing complex).

Also, in Waltham, the Boies Paper Mill was purchased, and was converted by Francis Cabot Lowell into a cotton textile mill.

Phineas Whiting and Josiah Fletcher began a cotton mill near the present day Lower Locks of Lowell MA.
A Week: Already, as appears from the records, "At a General Court held at Boston in New England, the 7th of the first month, 1643-4." — "Wassamequin, Nashoonon, Kutchamaquin, Massaconomet, and Squaw Sachem, did voluntarily submit themselves" to the English; and among other things did “promise to be willing from time to time to be instructed in the knowledge of God.” Being asked “Not to do any unnecessary work on the Sabbath day, especially within the gates of Christian towns,” they answered, “It is easy to them; they have not much to do on any day, and they can well take their rest on that day.” — “So,” says Winthrop, in his Journal, “we causing them to understand the articles, and all the ten commandments of God, and they freely assenting to all, they were solemnly received, and then presented the Court with twenty-six fathom more of wampum; and the Court gave each of them a coat of two yards of cloth, and their dinner; and to them and their men, every of them, a cup of sack at their departure; so they took leave and went away.” What journeyings on foot and on horseback through the wilderness, to preach the Gospel to these minks and muskrats! who first, no doubt, listened with their red ears out of a natural hospitality and courtesy, and afterward from curiosity or even interest, till at length there were “praying Indians,” and, as the General Court wrote to Cromwell, the “work is brought to this perfection, that some of the Indians themselves can pray and prophesy in a comfortable manner.” It was in fact an old battle and hunting ground through which we had been floating, the ancient dwelling-place of a race of hunters and warriors. Their weirs of stone, their arrowheads and hatchets, their pestles, and the mortars in which they pounded Indian corn before the white man had tasted it, lay concealed in the mud of the river bottom. Tradition still points out the spots where they took fish in the greatest numbers, by such arts as they possessed. It is a rapid story the historian will have to put together. Miantonimo,— Winthrop, — Webster. Soon he comes from Montaup to Bunker Hill, from bear-skins, parched corn, bows and arrows, to tiled roofs, wheat-fields, guns and swords. Pawtucket and Wamesit, where the Indians resorted in the fishing season, are now Lowell, the city of spindles and Manchester of America, which sends its cotton cloth round the globe. Even we youthful voyagers had spent a part of our lives in the village of Chelmsford, when the present city, whose bells we heard, was its obscure north district only, and the giant weaver was not yet fairly born. So old are we; so young is it.
A news item relating to the development of ELECTRIC WALDEN technology: During this year and the next, Nicholas-Louis Robert’s new papermaking machine went into production on the Somme River.  

William Lee obtained a permanent appointment as Inspector over the Salem Custom House.

The Concord Female Charitable Society was founded for “relieving distress, encouraging industry, and promoting virtue and happiness among the female part of the community”—this attention-needing part of the community being made up primarily of the young white females living in tenements above Derby’s Bridge on the Assabet River while working at the factory “started in the west part of town by John Brown of Framingham MA, where cotton could be woven”—whose unused reproductive organs were a potential source of contamination.  

The Concord Female Charitable Society was formed in 1814 for “relieving distress, encouraging industry, and promoting virtue and happiness among the female part of the community.” Two meetings are held annually for transacting the public business.

98. Paper was still being made exclusively from cotton rags, not from wood pulp (it would be the tree’s turn later, much later).
99. In a previous edifice. The structure in which Nathaniel Hawthorne would be the supervising Surveyor would not be erected until 1819.
100. Cynthia Dunbar Thoreau would join this society in 1825.
and others monthly to prepare clothing, and to devise other means to relieve distress.\(^\text{101}\)

For a year, Oliver Patten, hired from elsewhere, would be teaching Concord’s grammar students.

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Duration</th>
<th>Year</th>
<th>Name</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1812</td>
<td>Isaac Warren</td>
<td>1 year</td>
<td>1813</td>
<td>John Brown</td>
<td>1 year</td>
</tr>
<tr>
<td>1814</td>
<td>Oliver Patten</td>
<td>1 year</td>
<td>1815</td>
<td>Stevens Everett</td>
<td>9 months</td>
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<tr>
<td>1816</td>
<td>George F. Farley</td>
<td>1 year</td>
<td>1817</td>
<td>James Howe</td>
<td>1 year</td>
</tr>
<tr>
<td>1818</td>
<td>Samuel Barrett</td>
<td>1 year</td>
<td>1819</td>
<td>Benjamin Barrett</td>
<td>1 year</td>
</tr>
<tr>
<td>1820</td>
<td>Abner Forbes</td>
<td>2 years</td>
<td>1821</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1822</td>
<td>Othniel Dinsmore</td>
<td>3 years</td>
<td>1823</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1824</td>
<td></td>
<td></td>
<td>1825</td>
<td>James Furbish</td>
<td>1 year</td>
</tr>
<tr>
<td>1826</td>
<td>Edward Jarvis</td>
<td>1 year</td>
<td>1827</td>
<td>Horatio Wood</td>
<td>1 year</td>
</tr>
<tr>
<td>1828</td>
<td>David J. Merrill</td>
<td>1 year</td>
<td>1829</td>
<td>John Graham</td>
<td>1 year</td>
</tr>
<tr>
<td>1830</td>
<td></td>
<td></td>
<td>1831</td>
<td>John Brown</td>
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This was the condition of employment in Concord:

**EMPLOYMENT.**—Agriculture is the greatest source of wealth to the town. Manufactures are next in rank. Three farmers in the town own about 1000 sheep, the value of whose wool was estimated, in 1831, at $1500. There were raised 884,000 teasles. The oldest cotton-mill now [1835] in this state was commenced in this town in 1805, and the manufacture of cotton soon after began by Messrs. Hartwell and Brown, and has since been carried on by Ephraim H. Bellows through the various fluctuations of the business. The proprietors were incorporated in 1832. The mill contained 1100 spindles, 20 looms, employs 9 men, 3 boys, and 30 girls, works 50,000 lbs. of cotton, and makes 188,000 yards


(On or about November 11, 1837 *Henry David Thoreau* would indicate a familiarity with the contents of at least pages 2-3 and 6-9 of this historical study. On July 16, 1859 he would correct a date mistake buried in the body of the text.)
of cloth annually, valued at $17,900. David Loring commenced the manufacture of lead pipes in 1819, and of sheet lead in 1831. He employs 6 men, and upwards of 300,000 lbs. of lead are annually wrought, valued, when ready for sale, at about 20,000. In the extensive establishments for the manufacture of chaises, harness, and carriages, owned by Colonel William Whiting and the Messrs. Robbins, the value of the articles manufactured last year was estimated at $14,000. The smithery, where the iron work was made, used upwards of 100,000 lbs. of iron, and 4,000 of steel, in 1831. Henry H. Merrill, the proprietor, erected, in 1832, a steam-engine, and has otherwise enlarged his works. Elijah Wood commenced the manufacture of boots and shoes in 1812 and makes, annually, about $6,000 worth. Nehemiah Ball began the same business in 1832. From 3000 to 6000 gross black lead pencils and points are annually made in town. William Monroe commenced the manufacture of these in 1812; and his method of making them he regards as his own invention, having, he informs me, had no instruction from anyone in relation to the subject. "The lead for the first pencil was ground with the head of a hammer, was mixed in a common spoon, and the pencil sold to Benjamin Adams in Boston." In 1814 he made 1212 gross, which he sold for $5,946. He has since made about 35,000 gross; in some years 4,000 gross of pencils, and 1,000 of points. John Thoreau and others in the town have also carried on the business extensively, but the profits are now [1835] very much reduced. Mr. Thoreau also makes red lead pencils and glass paper. There were also made, in 1831, 50 brass time-pieces, 1,300 hats, 562 dozen bellows, 100 guns, 300,000 bricks, 500 barrels, 20,000 lbs. bar soap, 5,000 nail-kegs, and cabinet ware, the value of which was estimated at $14,860. This is what is generally termed wholesale business, and includes very little custom work; the articles manufactured being principally sold abroad. There are 6 warehouses and stores; one bookstore and bindery; two saw-mills; and two grist-mills, at which it was estimated that 12,000 bushels of grain were ground the last year [1834?]. The manufacturing and mechanical business of the town is increasing, and promises to be a great source of wealth.102

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Until 1817 the only product of the cotton mills of Rhode Island would be cotton yarn, with cloth being something produced out of this cotton yarn only by hand weavers. However, in this year Judge Daniel Lyman and John Thorp of Providence, and Mr. F.C. Lowell of Boston, collaborated to produce a powered machine and set it up at the Waltham cotton factory, and also, William Gilmour of Glasgow, Scotland, disembarked at Boston with the pattern for a powered loom and a powered dresser machine. John Slater invited Gilmour to come to Smithfield but would be unable to persuade his partners to fund the construction of an experimental loom. This would cause Gilmour would move on, and in the following year he would build a dozen looms for Judge Lyman’s Lymansville mill in North Providence. Also, he would allow David Wilkinson and Company, for the sum of $10, to use his patterns and construct another dozen looms.

In Maryland, white and black anti-slavery activists formed a Protection Society to combat kidnapping of free black Americans out of the cities. Operating chiefly out of Baltimore, by 1818 this society would frustrate more than 60 kidnappings, often via face-to-face confrontation of ship captains who had kidnapped free black city residents incarcerated in the holds of their ships pending sailing for Georgia or Louisiana. Of course, these 60 successes of necessity would have amounted only to a minor fraction of the kidnapping activity that must have gone on constantly during the slave-trading frenzy of the post-1815 cotton boom. This marginally effective Protection Society would receive harsh criticism from mainstream Baltimoreans who viewed its activities as a cover for helping slaves to escape their duties, and who dismissed the idea that such kidnapping was going on as largely a figment of the perfervid imagination of the anti-slavery activist. The Protection Society would, consequently, in 1819, disband.

The weaving of cotton cloth on power looms began at this point in North Providence, Rhode Island.

Roberts developed a fly-frame, an invention important to the development of the cloth industry. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.

W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial
revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, “if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances.”

This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances. The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860. Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system.

The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had

104. A list of these inventions most graphically illustrates this advance: —

1748, Lewis Paul, carding-machine.
1760, Robert Kay, drop-box.
1772, James Lees, improvements on carding-machine.
1775, Richard Arkwright, series of combinations.
1779, Samuel Compton, mule.
1785, Edmund Cartwright, power-loom.
1803-4, Radcliffe and Johnson, dressing-machine.
1817, Roberts, fly-frame.
1818, William Eaton, self-acting frame.
1825-30, Roberts, improvements on mule.


definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8½d. From this time until 1845 the price steadily fell, until in the latter year it reached 4d.; the only exception to this fall was in the years 1832-1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d. The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860.106 The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.107

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton “corner;” by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’état, which

106. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d.
107. From United States census reports.
failed in the war of 1861-1865.\textsuperscript{108}

An invention important to the development of the cloth industry occurred during this year. William Eaton developed a self-acting frame. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.

At one point during the year, cotton was reaching 31\textsuperscript{1/2} cents per pound on the world market. With cotton being that highly valued, the value of the labor of slaves, and the value of farmland, was also high. With one’s slaves and one’s farmland being of high value, one would take care to take care of them, and to work them as hard as they could possibly be worked. The important thing was, to create cotton and get it to market, and sell it for enough money to have collateral to purchase more slaves and more land, on margin, at high prices.

But in Liverpool, the cotton importers for the mills of England were becoming alarmed. A manufacturer who had only one source of raw materials was at the mercy of that source. The importers began to diversify by

\textsuperscript{108} Cf. United States census reports; and Olmsted, \textit{The Cotton Kingdom}. 

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switching some of their orders from America to East India. Toward the end of the year, the price of American cotton on the Liverpool dock was wavering. In December the news of this would reach America, and in one day the price of the cotton in transit would decline by 19%. By the end of the year cotton would be selling in New Orleans for 14\(\frac{3}{10}\) cents a pound. With cotton that low, the value of the labor of slaves, and the value of farmland, would be similarly lowered. With one’s slaves and one’s farmland being of low value, and with high interest to pay on large short-term loans taken out in order to purchase them, one would take care to work them as hard as they could possibly be worked, and it would not make a whole lot of difference if the slaves were worked right into the ground, or if the ground itself were worked down to sterile barrenness. The important thing was, to create cotton and get it to market and get whatever one could get for it, in order to meet the payments and not lose the plantation and thus lose the prestigious status of being white planters.

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113. From United States census reports.
114. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
July: The Concord Female Charitable Society donated 9½ yards of cotton cloth to be made into clothes for “Love Freeman’s boy.” Later, the Society would add two yards of gingham and a “small shirt.”

May 7, Friday: Johann Baptist Schenk’s cantata Der Mai for solo voices, chorus and orchestra was performed for the initial time, in the Vienna Redoutensaal.

As an example of the distress being caused by the Panic of 1819, on this day J. Joseph Henry II wrote to William Henry III observing that their rifle business was down “in consequence of the Cotton business being so very bad to the southern, that it will make out rifles business decline too.”

Friend Stephen Wanton Gould wrote in his journal:

6th day 7th of 5 M / Ourl friends have returned from the Quarterly Meeting. they say several Ministering friends were present from other parts of the Yearly Meeting among them were John Bailey, Micajah Collins, Experience Sherman & Avis Keene, also Mary Allen & that several of them with Several of our own Ministers were engaged to declare the Truth in the Power of it. — There was but little buisness to transact. — After the Quarterly Meeting was over - The funeral of Thos Anthony’s Wife was held at the Meeting house & Several lively & pertinent testimonys borne. — She was a Woman in rather Younger life say not to exceed 37 Years, but had attained very good Standing & much beloeved both in society & among her neighbours & by both much lamented. She promised pretty extensive usefulness in Society, being an Elder & had, sometimes appeared in public testimony. — I sympathise with her Consort, being an early friend of my youth

A crossover point which would have an interesting impact later, upon the US Civil War: importation of slavery-produced cotton into the British Isles had risen even higher than the importation of slavery-produced cane sugar.

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impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances."\textsuperscript{115} This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances.\textsuperscript{116} The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860.\textsuperscript{117} Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple. Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of \textit{laissez-faire} pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system. The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8½\textdollar. From this time until 1845 the price steadily fell, until in the latter year it reached 4\textdollar.; the only exception to this fall was in the

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\textsuperscript{117} Baines, \textit{HISTORY OF THE COTTON MANUFACTURE}, page 215. A bale weighed from 375 lbs. to 400 lbs.
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During the decade of the 1820s Vienna, the sex capital of Europe, would boast 20,000 sex-worker women, prostitutes, out of a total population of 400,000, which would have amounted to one of these working women for every seven male Viennese.121

Also, during the decade of the 1820s, with all 5 feet and 6 inches of Napoléon Bonaparte out of the picture,122 the Whig ladies of England would be able once again to procure their finery in Paris. One of the French innovations which was becoming current was what we would now term a “corset,” but it was then being referred to as a “divorce” — because it not only shoved up the breasts but also separated them into two distinct bulges in what has now become the conventional manner. Whereas, up to this point, under-drawers had been worn only by males, by prostitutes, and by stage dancers –Western women wearing instead a tight “invisible petticoat” over their loins— uniformly by the end of this decade Western women would have learned to wear drawers of the new, cheap, easily washable cotton cloth, and thus to completely eliminate risk of genital exposure while riding or while dismounting from carriages. Meanwhile, Western males were changing their culottes or breeches for the trousers of the peasant, the sans-culotte. That innovation had in fact begun in 1790s but had been, for the time being, local to France and to French political sympathies. As these long breeches became popular among the English and the Americans, and acquired the old English term “trousers,” the tailors began to make them tighter. In England, George “Beau” Brummel took tightness to the extreme, by devising a “stirrup” strap which passed under the instep of the boot between the sole and the heel. Pope Pius VII was incensed at this piece of male clothing—which we would call “stirrup pants” and which could be made in close-woven cotton nankeen or in doeskin leather— because he considered this sort of attire to be sexually obscene. However, once he had died in 1823 and was no longer to be offended, men would be losing interest in showing their legs.

The Merrimack Manufacturing Company recruited Yankee women to work in its cotton textile mills in Lowell MA.

David Livingston began his life work, at age 10 in the British Isles, as a machine tender in a cotton mill. He would read scientific treatises and works of travel by propping them on the machine before him and reading in phrases snatched from the page between his movements. (This is an interesting contrast with the situation among the machine-tending girls of Lowell MA, who, when they should dare to so much as bring a Bible into their workplace, would have it detected and confiscated by their foreman, it being distinctly a violation of the rules in America to allow one’s attention to drift during one’s machine-tending labor.)

121. However, a significant percentage of the income of these sex workers came from well-to-do gentlemen who visited the city specifically to indulge in its sex trade. (It would be a bit early to refer to these visitors as “tour-ists,” as that term probably would not become current until the next generation.)

122. The misinformation that the guy was barely 5 foot 2 inches springs from misunderstanding of an old French measurement system, the French pied de roi being by British standards nearly thirteen inches long.
A Week: Already, as appears from the records, "At a General Court held at Boston in New England, the 7th of the first month, 1643-4." — "Wassamequin, Nashoonon, Kutchamaquin, Massaconomet, and Squaw Sachem, did voluntarily submit themselves" to the English; and among other things did "promise to be willing from time to time to be instructed in the knowledge of God." Being asked "Not to do any unnecessary work on the Sabbath day, especially within the gates of Christian towns," they answered, "It is easy to them; they have not much to do on any day, and they can well take their rest on that day." — "So," says Winthrop, in his Journal, "we causing them to understand the articles, and all the ten commandments of God, and they freely assenting to all, they were solemnly received, and then presented the Court with twenty-six fathom more of wampom; and the Court gave each of them a coat of two yards of cloth, and their dinner; and to them and their men, every of them, a cup of sack at their departure; so they took leave and went away." What journeyings on foot and on horseback through the wilderness, to preach the Gospel to these minks and muskrats! who first, no doubt, listened with their red ears out of a natural hospitality and courtesy, and afterward from curiosity or even interest, till at length there were "praying Indians," and, as the General Court wrote to Cromwell, the "work is brought to this perfection, that some of the Indians themselves can pray and prophesy in a comfortable manner." It was in fact an old battle and hunting ground through which we had been floating, the ancient dwelling-place of a race of hunters and warriors. Their weirs of stone, their arrowheads and hatchets, their pestles, and the mortars in which they pounded Indian corn before the white man had tasted it, lay concealed in the mud of the river bottom. Tradition still points out the spots where they took fish in the greatest numbers, by such arts as they possessed. It is a rapid story the historian will have to put together.

Miantonimo,— Winthrop,— Webster. Soon he comes from Montaup to Bunker Hill, from bear-skins, parched corn, bows and arrows, to tiled roofs, wheat-fields, guns and swords. Pawtucket and Wamesit, where the Indians resorted in the fishing season, are now Lowell, the city of spindles and Manchester of America, which sends its cotton cloth round the globe. Even we youthful voyagers had spent a part of our lives in the village of Chelmsford, when the present city, whose bells we heard, was its obscure north district only, and the giant weaver was not yet fairly born. So old are we; so young is it.
John Brown of Concord, no relation, sold his cotton mill above Derby’s Bridge on the Assabet River to Caleb Bellows.

Hobhouse made amendments to Acts to Protect Child Labor in cotton factories.

The Buffum family relocated to Fall River (this city would be in Rhode Island rather than in Massachusetts until the Civil War) where Elizabeth would get married with Samuel Chace, an employee at his family’s prosperous cotton mill.123

123. Evidently by this point the following had already happened as described in Elizabeth C. Stevens’s ELIZABETH BUFFUM CHACE AND LILLIE CHACE WYMAN: A CENTURY OF ABOLITIONIST, SUFFRAGIST, AND WORKERS’ RIGHTS ACTIVISM (McFarland. 2003): “Chace’s own father, Arnold Buffum, was apparently disowned by the Smithfield (Rhode Island) monthly meeting for his radical abolitionist labors although he ‘remonstrated’ against the action and proved the allegations against him to be false.”
A series of inventions important to the development of the cloth industry would be occurring between this year and 1830. Roberts developed improvements on the mule. Because this development would have an impact on the demand for bales of cotton as a raw material for cloth, it would have an impact on the demand for field labor to grow this cotton, and therefore would have consequences in terms of human slavery — and in terms of the international slave trade.

W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances." The fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances. The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860. Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

Here it was that the fatal mistake of compromising with slavery in the beginning, and of the policy of laissez-faire pursued thereafter, became painfully manifest; for, instead now of a healthy, normal, economic development along proper industrial lines, we have the abnormal and fatal rise of a slave-labor large farming system, which, before it was realized, had so intertwined itself with and braced itself upon the economic forces of an industrial age, that a vast and terrible civil war was necessary to displace it. The tendencies to a patriarchal

125. A list of these inventions most graphically illustrates this advance: —
1748, Lewis Paul, carding-machine.
1760, Robert Kay, drop-box.
1772, James Lees, improvements on carding-machine.
1775, Richard Arkwright, series of combinations.
1779, Samuel Compton, mule.
1785, Edmund Cartwright, power-loom.
1803-4, Radcliffe and Johnson, dressing-machine.
1817, Roberts, fly-frame.
1818, William Eaton, self-acting frame.
1825-30, Roberts, improvements on mule.
serfdom, recognizable in the age of Washington and Jefferson, began slowly but surely to disappear; and in the second quarter of the century Southern slavery was irresistibly changing from a family institution to an industrial system. The development of Southern slavery has heretofore been viewed so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8½d. From this time until 1845 the price steadily fell, until in the latter year it reached 4d.; the only exception to this fall was in the years 1832–1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d. The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860.127 The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840–1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.128

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838–1839 it was able to show its power in the cotton “corner;” by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850–1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’état, which failed in the war of 1861–1865.129

127. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d.
128. From United States census reports.
129. Cf. United States census reports; and Olmsted, THE COTTON KINGDOM.
Ohio, Outside Cincinnati.

Married Life on a Forest Farm: Provisions, Entertainments.

We visited one farm which interested us particularly from its wild and lonely situation, and from the entire dependence of the inhabitants upon their own resources. It was a partial clearing in the very heart of the forest. The house was built on the side of a hill, so steep that a high ladder was necessary to enter the front door, while the back one opened against the hillside; at the foot of this sudden eminence ran a clear stream, whose bed had been deepened into a little reservoir, just opposite the house. A noble field of Indian-corn stretched away into the forest on one side, and a few half-cleared acres, with a shed or two upon them, occupied the other, giving accommodation to cows, horses, pigs, and chickens innumerable. Immediately before the house was a small potato garden, with a few peach and apple trees. The house was built of logs, and consisted of two rooms, besides a little shanty or lean-to, that was used as a kitchen. Both rooms were comfortably furnished with good beds, drawers, &c. The farmer’s wife, and a young woman who looked like her sister, were spinning, and three little children were playing about. The woman told me that they spun and wove all the cotton and woollen garments of the family, and knot all the stockings; her husband, though not a shoemaker by trade, made all the shoes. She manufactured all the soap and candles they used, and prepared her sugar from the sugar-trees on their farm. All she wanted with money, she said, was to buy coffee, tea, and whiskey, and she could “get enough any day by sending a batch of butter and chicken to market.” They used no wheat, nor sold any of their corn, which, though it appeared a very large quantity, was not more than they required to make their bread and cakes of various kinds, and to feed all their live stock during the winter. She did not look in health, and said they had all had ague in “the fall,” but she seemed contented, and proud of her independence; though it was in somewhat a mournful accent that she said, “’Tis strange to us to see company: I expect the sun may rise and set a hundred times before I shall see another human that does not belong to the family.”
February 14, Sunday: Friend Stephen Wanton Gould wrote in his journal:

1st day 14 of 2 M / Silent in the Morning - In the Afternoon
Wm Almy preached & Lydia Breed prayed

Friend Elias Hicks suffered a stroke on his right side and lost the ability to speak.
In his hand as he fell was his last letter, just completed, to Hugh Judge in Ohio,\footnote{Elias Hicks. \emph{Journal of the Life and Religious Labours of Elias Hicks. Written by Himself.} NY: Isaac T. Hopper, 1832.} which said in part that

\begin{quote}
[N]othing but this inward light and law, as it is heeded and obeyed, ever did, or ever can make a true and real Christian and child of God.... “glory to God in the highest, and on earth peace and good will to men” ... "They shall not hurt nor destroy in all my holy mountain; for the earth ... shall be full of the knowledge of the Lord, as the waters cover the sea.” These scripture testimonies give a true and correct description of the gospel state, and ... nothing can make them afraid that man can do unto them; as saith the prophet in his appeal to Jehovah: “Thou wilt keep him in perfect peace, whose mind is stayed on thee, because he trusteth in thee.”
\end{quote}

Placed on a bed with a cotton quilt over him, he could see that it was cotton and thus the product of slave labor, and so he picked and shoved feebly at the covering with his left hand until it slid to the floor.
The full text of the letter to Hugh Judge of Ohio from this Quaker leader was as follows:

Jericho, 2nd mo. 14th, 1830
Dear Hugh,
Thy very acceptable letter of the 21st ultimo, was duly received, and read with interest, tending to excite renewed sympathetic, and mutual fellow-feeling; and brought to my remembrance the cheering salutation of the blessed Jesus, our holy and perfect pattern and example, to his disciples, viz: "Be of good cheer, I have overcome the world." By which he assured his disciples that, by walking in the same pathway of self-denial and the cross which he trod to blessedness, they might also overcome the world; as nothing has ever enabled any ration being, in any age of the world, to overcome the spirit of the world, which lieth in wickedness, but the cross of Christ.

1835
Caleb Bellows sold the cotton mill founded by John Brown above Derby’s Bridge on the Assabet River in Concord to Calvin Carver Damon (hence “Damondale”). The new owner would raise the height of the milldam by 16 inches and install a larger water-wheel for more power, and by 1837 would quadruple the local production of cotton cloth.\footnote{131 This dam, although breached at the right side in the flood of Spring 1968 when 7 inches of rain fell on eastern Massachusetts within a 3-day period, is still to be seen.}
Some may query, what is the cross of Christ? To these I answer, it is the perfect law of God written on the tablet of the heart, and in the heart of every rational creature, in such indelible characters that all the powers of mortals cannot erase nor obliterate. Neither is there any power or means given or dispensed to the children of men, but this inward law and light by which the true and saving knowledge of God can be obtained. And by this inward law and light, all will be either justified or condemned, and all be made to know God for themselves, and left without excuse, agreeably to the prophecy of Jeremiah, and corroborating the testimony of Jesus in his last counsel and command to his disciples, not to depart from Jerusalem until they should receive power from on high; assuring them that they should receive power, when they had received the pouring forth of the spirit upon them, which would qualify them to bear witness of him in Judea, Jerusalem, Samaria, and to the uttermost parts of the earth; which was verified in a marvellous manner on the day of Pentecost, when thousands were converted to the Christian faith in one day. By which it is evident, that nothing but this inward light and law, as it is heeded and obeyed, ever did, or even can make a true and real Christian and child of God. And until the professors of Christianity agree to lay aside all their non-essentials in religion, and rally to this unchangeable foundation and standard of truth, wars and fighting, confusion and error will prevail, and the angelic song cannot be heard in our land, that of “glory to God in the highest, and on earth peace and good will to men.” But when all nations are made willing to make this inward law and light, the rule and standard of all their faith and works, then we shall be brought to know and believe alike, that there is but one Lord, one faith, and but one baptism; on God and Father, that is above all, through all, and in all; and then will all those glorious land consoling prophecies recorded in the scriptures of truth be fulfilled. Isaiah ii. 4, “He,” the Lord, “shall judge among the nations, and rebuke many people: and they shall beat their swords into plowshares and their spears into pruning hooks: nation shall not lift up sword against nation; neither shall they learn war any more.” Isaiah xi. “The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf, and the young lion, and the fatling together; and a little child shall lead them. And the cow and the bear shall feed; their young ones shall lie down together; and the lion shall eat straw like the ox. And the sucking child shall play on the hole of the asp, and the weaned child put his hand on the cockatrice’s den. They shall not hurt nor destroy in all my holy mountain: for the earth,” that is our earthly tabernacles, “shall be full of the knowledge of the Lord, as the waters cover the sea.”

These scripture testimonies give a true and correct description of the gospel state, and no rational being can be a real Christian and true disciple of Christ, until he comes to know all these things verified in his won experience, as every man and woman has more or less of all those different animal propensities and passions in their nature, and they predominate and bear rule, and are the source and fountain from when all wars, and every evil work proceed, and will continue as long as man remains in his first nature, and is governed by his animal spirit and propensities, which constitute the natural man, which Paul tells us “receiveth not the things of the spirit of God, for they are foolishness unto him, neither can he know them, because they are spiritually discerned.”
Events transpired in England which would, in the next year, eventuate in one of the most serious financial panics ever experienced in the United States of America, an economic downturn that would persist until the Year of Our Lord 1842, greatly overdetermining Thoreau’s prospects upon graduation from college:

The villain—the agent most responsible for the Panic of 1837—was the British government. In 1836 British officials raised interest rates to stem the outward flow of species, something they had not done in the previous few years. This led to an increase in interest rates on both sides of the Atlantic and, in combination with a fall in the price of the major American export crop, cotton, changed bank-noteholders’ views on the security of their assets. The bank panic, then, was largely the result of forces outside the control of Andrew Jackson or anyone else in the federal government. It is true that a stronger banking system might have resisted the shock better, but it is hard to see how Jackson’s veto of the Second Bank or his economic measures in 1836 weakened the system significantly. The plain fact is that a small open economy has little control over its own monetary system. Specie served as both bank reserves and international money, and the US financial system was the helpless victim of rapid shifts in the demand for species at home and abroad.

A machine for combing cotton was patented by Joshua Heilman.

At the facilities of the R.G. Hazard & Co cotton cloth company on the Saugatucket River in Peace Dale in South Kingstown, Rhode Island, one of the buildings burned (it would be rebuilt).

Between this point and 1850 ownership of the Machine Shop property at Saylesville passed from the Olney family to Elisha Godfrey and Steven Clark. Ultimately, Clark would pass his interest on to Arnold Moffett of Attleboro, Massachusetts.

132. The concept of overdetermination is an anachronism here, as it would not enter our scientific vocabulary until the 1890s. It would be 1st introduced, by Sigmund Freud, as “überdeterminiert” and “überbestimmt.”
September: Late in this year Lola Montez danced in München, where King Ludwig I became infatuated with her. As his mistress and as countess of Landsfeld she would influence him toward liberal and anti-Jesuit policies. Both radical and clericalist factions would become incensed at the influence she would wield.

There was a report in a Swiss newspaper that the German Christian F. Schönbein had been able to degrade ordinary cotton into a substance more explosive than gunpowder. Placing a “drachm” of this substance into a gun barrel, the good Professor was able to send a ball through three inches of deal plank some 600 feet away. The newspaper presented this under the headline “Explosive Cotton — Gunpowder Superseded.” In America, the Scientific American magazine referred to this as an “article of the humbuggous class.” The report had been, unfortunately, all too accurate: a quantity of cotton so degraded had already been presented to the Basle Society of Natural History and had already been tested as a propellant for deadly globules of lead. Soon the newspaper reports would be becoming slightly more accurate, as witness this report from The Mystery:

EXPLOSIVE COTTON

Two German Philosophers have discovered a mode of preparing Cotton so as to give it all the properties of Gunpowder. The mode of preparing it is thus explained:

“In order to obtain explosive cotton, I steed it for half a minute in strongly concentrated nitric acid, which I prepare by the distillation of ten parts of dry saltpetre and six parts of the oil of vitriol. I then wash it immediately in water, renewing the water so as to get rid entirely of the acid, taking care to separate the portions which adhere too closely together. It is then dried and the process is thus completed. The effects of this preparation have astonished all who have

133. After several decades of experimentation to make it more stable, guncotton would supercede black powder in many of its applications.

134. Incidentally, cotton is the sort of stuff that can be degraded into carbohydrates and sugars as well. The English might find some use for this new lead-propellant on the island of Ireland, where it seemed there was a local concentration of Irish, more of them than anyone really had any use for — but in this universe so exquisitely designed by God, this popular surplus would prove to be the sort of problem that can solve itself merely through inattention!
This corroborated the declaration of Jesus to Nicodemus, “that, except a man be born again, he cannot see the kingdom of God;” for “that which is born of the flesh is flesh, and that which is born of the spirit is spirit.” Here Jesus assures us, beyond all doubt, that nothing but spirit can either see or enter into the kingdom of God; and this confirms Paul’s doctrine, that “as many as are led by the spirit of God are the sons of God,” and “joint heirs with Christ.” And Jesus assures us, by his declaration to his disciples, John xiv. 16, 17, “If ye love me, keep my commandments; and I will pray the Father, and he shall give you another comforter, that he may abide with you for ever, even the spirit of truth, whom the world cannot receive;” that is, men and women in their natural state, who have not given up to be led by this spirit of truth, that leads and guides into all truth; “because the see him not, neither do they know him, but ye know him, for he dwelleth with you, and shall be in you.” And as these give up to be wholly led and guided by him, the new birth is brought forth in them, and they witness the truth of another testimony of Paul’s, even that of being created anew in Christ Jesus unto good works, which God had fore-ordained that all his new-born children should walk in them, and thereby show forth by their fruits and good works, that they were truly children of God, born of his spirit, and taught by him; agreeably to the testimony of the prophet, that “the children of the Lord are all taught of the Lord, and in righteousness they are established, and great is the peace of his children.” And nothing can make them afraid that man can do unto them; as saith the prophet in his appeal to Jehovah, “Thou wilt keep him in perfect peace, whose mind is staid on thee, because he trusteth in thee.” Therefore, let every one that loves the truth, for God is truth, “trust in the Lord forever, for in the Lord Jehovah there is everlasting strength.”

I write these things to thee, not as though thou didst not know them, but as a witness to thy experience, as “two are better than one, and a threefold cord is not quickly broken.”

I will now draw to a close, with just adding, for the encouragement, be of good cheer, for no new thing has happened to us; for it has ever been the lot of the righteous to pass through many trials and tribulations, in their passage to that glorious, everlasting, peaceful, and happy abode, where all sorrow and sighing come to an end – the value of which is above all price; for when we have given all that we have and can give, and suffered and suffered all that we can suffer, it is still infinitely below its real value. And if we are favoured to gain an inheritance in that blissful and peaceful abode, “where the wicked cease troubling, and the weary are at rest, “we must ascribe it all to the unmerited mercy and loving-kindness of our heavenly Father, who remains to be God over all, blessed for ever.

I will now conclude; and in the fulness of brotherly love to thee and thine, in which my family unite, subscribe thy affectionate friend,

ELIAS HICKS

TO HUGH JUDGE.

Please present my love to all my friends, as way opens.
witnessed them. The smallest quantity of this cotton placed upon an anvil, and struck with a hammer, produces and explosion equal to that of fulminating mercury. When a light is set to it, it explodes like gunpowder, and in a gun produces all the effects of gunpowder in much smaller quantities. The explosive cotton is to be used precisely the same way as gunpowder. It is made into a kind of plug, after which a wadding is introduced, as with gunpowder, and over this the ball is placed, and all are rammed down with a ramrod. The explosion of the capsule produces that of cotton.”

Experiments have been made with the prepared cotton by several European governments, all of which have tested the invention satisfactorily. Two ounces of the prepared cotton are found to have as much force as three ounces of gunpowder.

Mr. Von Schmidt, of New York, also claims to have made the same discovery, and the cotton prepared by his mode, has been tested by the War Department at Washington with complete success.

The advantages of this cotton over gunpowder are: 1st. It is cheaper. 2d. It is unattended with danger in its preparation. 5d. It can be transported with more ease and safety. 4th. It is cleaner when it explodes, it leaves neither smell nor dirt behind. 6th. It is not injured by wet, after being thoroughly soaked, and dried again, it explodes as well as ever.

This invention will work an entire revolution in the shooting business, in a very short time.

Steam powered a US cotton mill for the first time at Salem in Massachusetts, where the Naumkeag Steam Cotton Mill began production.
The last of the properties of the Association of Industry and Education, namely the old oil mill, the 4-story brick factory structure, its associated machine shops, and the establishment store, were disposed of for the round sum of $10,000 by Joseph C. Martin and Hall Judd to the last treasurer of the Association, Friend Samuel L. Hill. George W. Benson would be a particular friend to two of the forlorn black people who had been thus cut loose in a white-dominated rural society, Sojourner Truth and Basil Dorsey. He would help Truth obtain housing for herself, and would enable Dorsey to take over the “teaming,” which is to say, the driving of draft animals, for his surviving cotton factory.

Nell Painter’s photos of the silk mill in Florence, and of the house on one of Sojourner Truth’s two lots there, do not have the appearance, to my eye, of period Daguerreotypes. Having been quite unable to find either in the local Northampton libraries or the college libraries any images contemporary with Truth’s sojourn in Florence during that very early period of Daguerreotypy (I did come across a very rough sketch of the original oil mill that stood at that dam on the Mill River), I had driven past these addresses but had refrained from snapping present photos — it appeared to me that the structure now on that south lot of hers must be of later construction or at the very least quite extensively renovated, and I don’t know that those outbuildings surrounding the core factory structure were in place before it was shifted from silk to cotton processing.

This year the US cotton crop reached more than 2 million bales. The Red Delicious variety of apple was discovered in Iowa. Jersey cows were introduced into the US. In this year sixteen English sparrows were imported to Brooklyn in a well-intentioned attempt to bring insect populations under control. (Incidentally, the human population of the planet had at this point come to be more than a billion people, which was at least twice the population of two centuries earlier — this despite the fact that since its inception, roughly half the children born in the United States of America had been dying before the age of 5 — but there seemed then and there seems now no realistic possibility of breeding a sparrow large enough to bring these human populations under control.)

Holyoke was incorporated and the first cotton mill there began operation. Settlement of the new city would proceed slowly over this decade. Several textile mills, some paper mills and a machine shop would be beginning production. The water power companies would be divesting themselves of their manufacturing assets.

Basil Dorsey, the team-master for the cotton factory in Northampton, had at this point saved up some $50.135 It was hard for him to make a decent salary, however, among other reasons because he was fearful of going into any larger city in New England, where there were greater numbers of strangers. To be able to take merchandise into Boston without running afoul of the roving slavecatchers would be of great help to him. Therefore a collection was taken up, and the Southern white family from whom Dorsey had escaped was paid off with the accumulated $50 savings plus this money collected locally, and eventually Dorsey would receive his manumission papers.

135. To get a sense of what that amounted to in today’s money, consult <http://www.measuringworth.com/exchange/>
January: John Stuart Mill responded to the “The Negro Question” piece that Thomas Carlyle had written for the December 1st issue of Fraser’s Magazine (which Carlyle would rettitle in 1852 in its pamphlet form in reaction to Mill, precisely in order to exacerbate its outrage, “Occasional Discourse on the Nigger Question”) by averring that although blacks were clearly inferior, they were yet capable, by being allowed to share in the benefits of civilization, of being improved.  

Mill did deliver himself here of some remarkably Thoreauvian and wide-marginish sentiments: “In opposition to the ‘gospel of work,’ I would assert the gospel of leisure, and maintain that human beings cannot rise to the finer attributes of their nature compatibly with a life filled with labour.”


Edward Damon, son of the mill owner Calvin Carver Damon, was working in the cotton room of his father’s factory in Concord, “tending drawing” — that is, he was a child card-tender. If he were nominally being paid the same wage as poorer children of necessity consigned by their families to such activities, he was receiving $2.20 the week. However, it is unlikely that his father would have insisted that he be at work the usual 6 days a week, for that would have kept his heir Edward like the other child labor away from school. Edward’s testimony was that a normal workday for such a working child in 1850 amounted to 11 1/2 hours of tending the demanding, constantly spinning machinery:

136. Gee, thanks, Mr Mill, that’s mighty white of you. With kind and thoughtful people like you for friends, a person of color truly doesn’t have need any enemies such as Mr Carlyle!
It is very clean work for the factory. I go to work at seven and work half an hour, then half an hour for breakfast, then work again from eight o’clock and work until half-past twelve. Commence again at one o’clock and work until half-past seven. I like it very well.

This “very clean work for the factory,” you will understand, is what we now know produces the lifelong debilitating illness termed “cotton lung.” At the age of 17 young Edward would take over the managership of the factory from his father Calvin, and in May 1859 it would be he who would hire local surveyor Thoreau to check the boundaries and the placement of the buildings.
We know from Stanley Lebergott’s MANPOWER IN ECONOMIC GROWTH (NY: McGraw-Hill, 1964) what monthly farm wages typically amounted to in Massachusetts during this period, over and above of course one’s room and board:

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage</th>
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<tr>
<td>1818</td>
<td>$13.50</td>
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<tr>
<td>1826</td>
<td>$13.50</td>
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<tr>
<td>1830</td>
<td>$12.00</td>
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<tr>
<td>1850</td>
<td>$13.55</td>
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<tr>
<td>1860</td>
<td>$15.34</td>
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</table>

Incidentally, although such wages were ordinarily significantly higher in Massachusetts than elsewhere, during this period the wage was higher in Rhode Island.

Martin Johnson Heade was still maintaining his studios in New-York City, at the Tenth Street Studio Building. His “Sunset on the Meadows” and “Approaching Thunder Storm” were on exhibit at the National Academy of Design in New-York. During this year he would visit Burlington, Vermont and the Thousand Islands of the St. Lawrence River, and then reside at 25 Waterman Street in Providence, Rhode Island. It was during this year, or possibly the next, that he prepared his intriguing oil on canvas, “Two Owls at Sunset,” with its exceedingly Thoreauvian perspective of the two tiny owls silhouetted against the sky above the barren dark landscape: “Nature ... invites us to lay our eye level with the smallest leaf, and take an insect view of its plain.”

137. It has been suggested that this painting might be the perfect illustration to accompany Walden’s “I rejoice that there are owls. Let them do the idiotic and maniacal hooting for men. It is a sound admirably suited to swamps and twilight woods which no day illustrates, suggesting a vast and undeveloped nature which men have not recognized. They represent the stark twilight and unsatisfied thoughts which all have.”
Within the Providence city limits were the Providence Steam Mill that had been established by Samuel Slater and others in 1827, the Oriental Mills at the corner of Admiral and Whipple Streets, the Elmwood Cotton Mills on Mawney Street, the factories of B.B. & R. Knight at Carpenter Street and Broad Street, and the factories of the Fletcher Manufacturing Company on Charles Street. In addition, 77 cotton-mills located outside the city had their business offices there.

Witnessing a torchlit parade in the political canvass of this year, Thomas Allen Jenckes remarked that it would “not take much to turn those men into soldiers.”

By this point the rising price of cotton had utterly revolutionized the American South. Cotton had become king
W.E. Burghardt Du Bois: The history of slavery and the slave-trade after 1820 must be read in the light of the industrial revolution through which the civilized world passed in the first half of the nineteenth century. Between the years 1775 and 1825 occurred economic events and changes of the highest importance and widest influence. Though all branches of industry felt the impulse of this new industrial life, yet, "if we consider single industries, cotton manufacture has, during the nineteenth century, made the most magnificent and gigantic advances."138

This fact is easily explained by the remarkable series of inventions that revolutionized this industry between 1738 and 1830, including Arkwright’s, Watt’s, Compton’s, and Cartwright’s epoch-making contrivances.139 The effect which these inventions had on the manufacture of cotton goods is best illustrated by the fact that in England, the chief cotton market of the world, the consumption of raw cotton rose steadily from 13,000 bales in 1781, to 572,000 in 1820, to 871,000 in 1830, and to 3,366,000 in 1860.140 Very early, therefore, came the query whence the supply of raw cotton was to come. Tentative experiments on the rich, broad fields of the Southern United States, together with the indispensable invention of Whitney’s cotton-gin, soon answered this question: a new economic future was opened up to this land, and immediately the whole South began to extend its cotton culture, and more and more to throw its whole energy into this one staple.

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The development of Southern slavery has heretofore been viewed

139. A list of these inventions most graphically illustrates this advance: —
1748, Lewis Paul, carding-machine.
1760, Robert Kay, drop-box.
1772, James Lees, improvements on carding-machine.
1775, Richard Arkwright, series of combinations.
1779, Samuel Compton, mule.
1785, Edmund Cartwright, power-loom.
1803-4, Radcliffe and Johnson, dressing-machine.
1817, Roberts, fly-frame.
1818, William Eaton, self-acting frame.
1825-30, Roberts, improvements on mule.
so exclusively from the ethical and social standpoint that we are apt to forget its close and indissoluble connection with the world’s cotton market. Beginning with 1820, a little after the close of the Napoleonic wars, when the industry of cotton manufacture had begun its modern development and the South had definitely assumed her position as chief producer of raw cotton, we find the average price of cotton per pound, 8½d. From this time until 1845 the price steadily fell, until in the latter year it reached 4d.; the only exception to this fall was in the years 1832-1839, when, among other things, a strong increase in the English demand, together with an attempt of the young slave power to “corner” the market, sent the price up as high as 11d. The demand for cotton goods soon outran a crop which McCullough had pronounced “prodigious,” and after 1845 the price started on a steady rise, which, except for the checks suffered during the continental revolutions and the Crimean War, continued until 1860. The steady increase in the production of cotton explains the fall in price down to 1845. In 1822 the crop was a half-million bales; in 1831, a million; in 1838, a million and a half; and in 1840-1843, two million. By this time the world’s consumption of cotton goods began to increase so rapidly that, in spite of the increase in Southern crops, the price kept rising. Three million bales were gathered in 1852, three and a half million in 1856, and the remarkable crop of five million bales in 1860.

Here we have data to explain largely the economic development of the South. By 1822 the large-plantation slave system had gained footing; in 1838-1839 it was able to show its power in the cotton “corner;” by the end of the next decade it had not only gained a solid economic foundation, but it had built a closed oligarchy with a political policy. The changes in price during the next few years drove out of competition many survivors of the small-farming free-labor system, and put the slave régime in position to dictate the policy of the nation. The zenith of the system and the first inevitable signs of decay came in the years 1850-1860, when the rising price of cotton threw the whole economic energy of the South into its cultivation, leading to a terrible consumption of soil and slaves, to a great increase in the size of plantations, and to increasing power and effrontery on the part of the slave barons. Finally, when a rising moral crusade conjoined with threatened economic disaster, the oligarchy, encouraged by the state of the cotton market, risked all on a political coup-d’État, which failed in the war of 1861-1865.

141. The prices cited are from Newmarch and Tooke, and refer to the London market. The average price in 1855-60 was about 7d. 142. From United States census reports. 143. Cf. United States census reports; and Olmsted, The Cotton Kingdom.
In Fairfield, South Carolina in the fall of 1843, one John L. Brown had been sentenced “to hang by the neck until your body be dead” for having aided a South Carolinian who was trying to escape from enslavement in South Carolina. But this had not been the famous enslaver of Providence, Rhode Island, John Brown, nor had it been the businessman John Brown of Newburyport, nor had it been the businessman John Brown of Concord, nor had it been the northern interloper of 1859, Captain John Brown — this had been a Maine man. The national and international petitions for clemency in this case, landing on the desk of Governor James Henry Hammond (1810-1864), had caused the governor to commute the sentence of death and then to respond at length in defense of the institution of chattel slavery and in opposition to the practice of slave stealing, and the Charleston SC Mercury had subsequently put his thoughts out in the form of pamphlets, and then they had been republished as Pro-Slavery Argument, and in this year this Southern gentleman’s responses received additional general publication as Cotton Is King and Pro-Slavery Arguments.

William Still went into the stove business. Later he branched out into the coal business.

Oberlin, Ohio’s population of 2,115 including 422 black Americans, which would work out to be 20%. A monument was erected in honor of the town’s three free men of color who had died in the raid on Harpers Ferry or been hanged for treason, John Anderson Copeland, Jr., his uncle Lewis Sheridan Leary, and “Emperor” Shields Green (the 8-foot marble monument would be moved to Martin Luther King, Jr. Park on Vine Street in 1971).

There was severe drouth in Kansas and 30,000 disillusioned white settlers abandoned the state.
Frederick Law Olmsted’s THE COTTON KINGDOM re-recycled the three books which he had previously based upon his newspaper articles about his 1852 trip through the South.

This sketch in The Illustrated London News (Volume 38, pages 138-140) was accompanied by an eyewitness description of slave auctions in Richmond, Virginia:

The civil war would not be kind to Lowell MA. Recruitment of Irish and other foreign-born Americans by the Union Army would steal away the labor supply. The mills would sell off their raw unprocessed cotton and close for long periods and the remaining mill operatives would be out of work.
A Week: Already, as appears from the records, "At a General Court held at Boston in New England, the 7th of the first month, 1643-4." — "Wassamequin, Nashoonon, Kutchamaquin, Massaconomet, and Squaw Sachem, did voluntarily submit themselves" to the English; and among other things did "promise to be willing from time to time to be instructed in the knowledge of God." Being asked "Not to do any unnecessary work on the Sabbath day, especially within the gates of Christian towns," they answered, "It is easy to them; they have not much to do on any day, and they can well take their rest on that day." — "So," says Winthrop, in his Journal, "we causing them to understand the articles, and all the ten commandments of God, and they freely assenting to all, they were solemnly received, and then presented the Court with twenty-six fathom more of wampom; and the Court gave each of them a coat of two yards of cloth, and their dinner; and to them and their men, every of them, a cup of sack at their departure; so they took leave and went away." What journeyings on foot and on horseback through the wilderness, to preach the Gospel to these minks and muskrats! who first, no doubt, listened with their red ears out of a natural hospitality and courtesy, and afterward from curiosity or even interest, till at length there were "praying Indians," and, as the General Court wrote to Cromwell, the "work is brought to this perfection, that some of the Indians themselves can pray and prophesy in a comfortable manner." It was in fact an old battle and hunting ground through which we had been floating, the ancient dwelling-place of a race of hunters and warriors. Their weirs of stone, their arrowheads and hatchets, their pestles, and the mortars in which they pounded Indian corn before the white man had tasted it, lay concealed in the mud of the river bottom. Tradition still points out the spots where they took fish in the greatest numbers, by such arts as they possessed. It is a rapid story the historian will have to put together. Miantonimo,— Winthrop, — Webster. Soon he comes from Montaup to Bunker Hill, from bear-skins, parched corn, bows and arrows, to tiled roofs, wheat-fields, guns and swords. Pawtucket and Wamesit, where the Indians resorted in the fishing season, are now Lowell, the city of spindles and Manchester of America, which sends its cotton cloth round the globe. Even we youthful voyagers had spent a part of our lives in the village of Chelmsford, when the present city, whose bells we heard, was its obscure north district only, and the giant weaver was not yet fairly born. So old are we; so young is it.
February 16, Tuesday: James Robert Ballantyne died.

That night Captain Edward H. Faucon captured the Pet as it attempted to slip out of Wilmington harbor loaded with cotton. –A prize. –Retirement money. –All things fair in love and war.

Dr. David Fairchild, US Department of Agriculture official, imported 75 flowering cherry trees and 25 single-flowered weeping types from the Yokohama Nursery Company in Japan. As a test of their hardiness he planted these on a hillside on his own land in Chevy Chase, Maryland.

The first county agent, W.C. Stallings, began work in Smith County in Texas. Employed to work with farmers to combat the ravages of the boll weevil on the cotton crop, this model would quickly be adopted in other Southern states. (By 1914 the Smith-Lever Act for cooperative extension had been passed.)

The Sanforizer Company introduced an ammonia-based process, devised by Sanford Cluett, that causes cotton fibers to swell, preventing shrinkage when washed.
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“It’s all now you see. Yesterday won’t be over until tomorrow and tomorrow began ten thousand years ago.”
- Remark by character “Garin Stevens” in William Faulkner’s INTRUDER IN THE DUST

Prepared: December 6, 2013
This stuff presumably looks to you as if it were generated by a human. Such is not the case. Instead, someone has requested that we pull it out of the hat of a pirate who has grown out of the shoulder of our pet parrot "Laura" (as above). What these chronological lists are: they are research reports compiled by ARRGH algorithms out of a database of modules which we term the Kouroo Contexture (this is data mining). To respond to such a request for information we merely push a button.
Commonly, the first output of the algorithm has obvious deficiencies and we need to go back into the modules stored in the contexture and do a minor amount of tweaking, and then we need to punch that button again and recompile the chronology—but there is nothing here that remotely resembles the ordinary “writerly” process you know and love. As the contents of this originating contexture improve, and as the programming improves, and as funding becomes available (to date no funding whatever has been needed in the creation of this facility, the entire operation being run out of pocket change) we expect a diminished need to do such tweaking and recompiling, and we fully expect to achieve a simulation of a generous and untiring robotic research librarian. Onward and upward in this brave new world.

First come first serve. There is no charge. Place requests with <Kouroo@kouroo.info>. Arrgh.