

EXTRACTS

From a Lecture, read to the Raleigh Mechanical Association, on their 4th Anniversary, By W. W. HOLLOX, Esq.

Gentlemen:—The age is eminently practical and energetic. In every department of knowledge, and in all the avenues which lead to wealth and happiness and honor, the lights of experience are pouring in upon the darkness of conjecture; falsehood is bowing beneath the sceptre and the diadem of truth; and men are beginning to understand, more fully and properly, their responsibilities, absolute and relative, and to appreciate the powers, the hopes and the destinies of the race. At no period, perhaps, in the history of the world, have the sciences been so intensely studied and so widely disseminated as they are at present. And if what we have been accustomed to denigrate as antiquity, be nothing more than the infancy of mankind, then indeed do we live in the vigor and in the fullness of time, when law and order and civilization, refined and purified by the fires of a generous freedom, and melted by the hand of Christianity, throw their broad shields at once over the richest and the poorest, giving no greater protection to the Prince, amid the pomp and grandeur of distinction, than they do to the Mechanic and the Artisan, amid their perplexities, their toils and their labors. The sceptre of those who were once mighty to oppress the nations, has been broken like an untempered spear; and the systems of the dark ages, which rose slowly, but effectually, in the midst of blood, and carnage and disorder, have been torn and scattered to the winds of desolation. The feudal system—where is it? Ask the occupants of the tottering thrones of Europe, and the reluctant answer shall come forth, that the revival and extension of learning in the fifteenth century, the invention of Printing, the transcendent eloquence of Martin Luther, and the progress of liberal opinions, roused mankind to a knowledge of their rights; and that sturdy Esquire and Baron bold, the statesman and the grandeur of feudal ceremonial, and the excitement and renown of tilt and tournament, repose in death amid the chambers of the mighty past.

The benefits which have been conferred upon man by the votaries of art and science, are almost incalculable. They have not only gratified his physical wants, but opened new fields—boundless and ever-during fields—over which his mental faculties may linger, and perpetually gather the elements of freshness and delight. They have done more than this; they have changed his ideas of human greatness. Fortified by the principles of a sound and practical philosophy, and sensible of his tremendous responsibilities as a citizen of two worlds, the possessor of high intelligence now weighs every thing in the scales of justice and of virtue, and estimates human greatness, not by the number of cities the aspirant for renown may have demolished, nor yet by the gore he may have spilt, but by the amount of permanent and substantial benefit he may have contributed to confer upon mankind. Thus estimated, how little is Napoleon, and how great are Watt and Fulton! How does he sink in the comparison! When the former had triumphed at Arcola, and planted his eagles upon the battlements of imperial Rome; when throne after throne had crumbled and gone down beneath the lightning of his eye; when his battle-thunders, rolling from the Pyramids to the shores of the Baltic, had laid almost all Europe prostrate at his feet; and when, with the iron crown of Charlemagne upon his brow, he was revelling, in anticipation, amid all the pomp and splendor and majesty of universal empire, the astonished spectator might have fancied, that, as he was the controller of the destinies of nations, so he was also their greatest benefactor, and that he was not more the favorite of fortune in his contentions for dominion, than in the extraordinary facility with which he bent learning and art and science to the performance of his will. Yet what European—what American thought—when gazing upon the wonderful achievements of the child of destiny, that long before this prodigy of valour saw the light, there had been approximating to perfection an invention which was to be rendered of more practical importance to the world than all the chieftains that ever rose, or reigned, or fell? Napoleon perished in the midst of the splendid visions of his high ambition, leaving no enduring memorial of his affection for mankind; but Watt and Fulton have wrought a benefit, which will raise emotions of admiration and gratitude in the human bosom, whosoever their names shall be uttered throughout all coming time.

An eminent writer (Lord Brougham) has said that science means knowledge reduced to a system; that is, arranged in a regular order, so as to be conveniently taught, easily remembered, and readily applied. And the same writer has divided the sciences into three great classes: those which relate to number and quantity, those which relate to matter, and those which relate to mind. The first are called the Mathematics, and teach the properties of numbers and of figures; the second are called Natural Philosophy, and teach the properties of the various bodies which we are acquainted with by means of our senses; and the third are called Intellectual or Moral Philosophy, and teach the nature of the mind, or in other words, the moral nature of man, both as an individual and as a member of society. It may be laid down as an indisputable axiom, that every mechanic should be a practical philosopher—that is, he should know enough of nature to enable him not merely to prosecute effectually his peculiar calling, but to invent and to improve, and to extend the limits of mechanical knowledge. And it is by no means necessary that a man should discover new, in order to merit this high and noble title. The greatest philosophers of the world have ever seen, were active, working men. They performed their day's work faithfully and skillfully, and amassed, during the evenings, knowledge which enabled them to go on in their vocations with still greater fidelity and skill. Every young mechanic especially, should

study that science, upon the principles of which his trade is based, and by which it is directed. If he be a hatter, a tanner, a dyer, a painter or a bleacher, a knowledge of chemistry will aid him to an indefinite extent. And the principle holds with regard to every other trade. If he be a carpenter, for instance, he should study architecture in all its branches, fully and thoroughly. If a millwright, the mechanic powers should engage his attention; he should be well acquainted with the peculiar structure of wheels, so as to know how to accommodate them to certain falls of water; and if the machinery is to be propelled by steam, which is but the vapor of water, or by water itself, he should study the science of the motion and force of fluids, in order to render himself capable of applying them to practical purposes.

In this State, particularly, the great mass of the mechanic class pay too little attention to elementary principles. They do their work as their fathers did it before them, without knowing, in a great many cases, the fundamental principles by which they are guided and directed. And often, gentlemen who have no immediate and indispensable connection with the science of mechanics, know more about it than many mechanics, who improve in their trades only in proportion to the acquaintance they form with the elementary principles of mechanical knowledge. Mr. Webster, for example, is not more celebrated in literature and law, than he is for his intimate acquaintance with the science of mechanics. He never constructed a machine, and yet he knows how a machine ought to be constructed. It is related that on a certain occasion, a distinguished son of North Carolina, who had, in his youth, been an operative mechanic, and who had, perhaps, built many a saw-mill, visited the great Yankee, and for the purpose of knowing him personally and of conversing with him face to face. The North Carolinian, sensible of his inferiority to Mr. Webster in law and literature—although he was not, perhaps, his inferior in natural endowments—very naturally conceived the idea of opening the conversation upon some subject in mechanical science, and accordingly directed his attention to machinery in general, and to the construction of saw-mills in particular. And it is said he subsequently declared, that Mr. Webster told him more about saw-mills in one hour, than he had learned in all his life. It is said, moreover, that when the port of Boston was to be gaged, no mechanic could be found who could do it, and that the task devolved upon an eminent Judge of Massachusetts, whose proficiency in mechanical science was proverbial. Indeed, this gentleman knew so much about mechanics, that whenever he had occasion to have his horse shod, his shoes mended, a hat made, or a house constructed, he never failed to inspire the blacksmith, the shoemaker, the hatter, or the carpenter with the conviction, that he, the Judge, was not only a good mechanic, but the very best mechanic in Massachusetts.

An intimate acquaintance with the laws of nature will show the mechanic how to avoid attempting impossibilities; secure him from important mistakes in attempting what is, in itself, possible, by means either inadequate or opposed to the end in view; enable him to accomplish his ends in the easiest, shortest, most economical and effectual manner; and induce him to attempt, and enable him to accomplish, objects, which, but for such knowledge, he would never have thought of undertaking.

In the first place, if those who have invented contrivances for obtaining perpetual motion, had known how to avoid attempting impossibilities—if they had known that the law of gravity was in their way, their labors and ingenuity might have been directed to practical and important purposes, and some great machine might now have attested the strength and brilliancy of their genius.—And how many important mistakes are made, by attempting things which are in themselves possible, by means either too slender, or opposed to the end to be accomplished! The smelting of iron, for example, requires the application of the most violent heat that can be raised, and is commonly performed in tall furnaces, urged by great iron bellows, driven by steam-engines. Instead of employing this power to force air into the furnace, through the intervention of bellows, it was, on one occasion, attempted to employ the steam itself, in apparently a much less circuitous manner, by directing the current of steam in a violent blast, from the boiler at once into the fire. From one of the known ingredients of steam, being a highly inflammable body, and the other that essential part of the air which supports combustion, it was imagined that this would have the effect of increasing the fire to tenfold fury, whereas it simply blew it out; a result which a slight consideration of the laws of chemical combination, and the state in which the ingredient elements exist in steam, would have enabled any one to predict without a trial.

Another illustration, from the same author, to show that every mechanic ought to know his science well, in order to accomplish his ends in the easiest and most effectual manner, may not be inappropriate. In some parts of France, where mill-stones are made, a mass of stone sufficiently large is cut into a cylinder several feet high, and the question then arises how to subdivide this into horizontal pieces, so as to make as many mill-stones. For this purpose horizontal indentations or grooves are chiselled out quite round the cylinder, at distances corresponding to the thickness intended to be given to the mill-stones, into which wedges of dried wood are driven. The wedges are then wetted, or exposed to the night dew, and next morning the different pieces are found separated from each other by the expansion of the wood, consequent on its absorption of moisture; an irresistible natural power thus accomplishing, almost without any trouble, and at no expense, an operation which, from the peculiar hardness and texture of the stone, would otherwise be impracticable but by the most powerful machinery or the most persevering labor.

A knowledge of the sciences ought to be acquired, not only because it gives an individual a great advantage over his neighbors

in a pecuniary sense, but because it elevates and enlarges his mind, and makes him more competent to discharge his duties as a member of society. And in this country, almost every mechanic has an opportunity as well of learning the scientific principles of his trade, as of becoming highly useful and honorable in any sphere or profession of life.—Here he labors under none of the peculiar and severe restrictions which are imposed upon the mechanics of Europe. No one, I have been informed, however well skilled he may be in his trade, is allowed to set up as a master-workman in Germany, until he has travelled or wandered for the space of three years. For the purpose of enabling the journeyman to wander, without being molested or delayed, the master with whom he has served his apprenticeship, furnishes him with a duly authenticated wandering-book, and he is sent forth to beg for work or starve. During this period of painful and oppressive pilgrimage, he visits at least seven of the principal cities, where his trade is carried on; and even then, before he is admitted to the privileges of the craft, he is under the necessity of paying a tax to the government, and of producing what is called his master-piece, which is often rejected. And in England, until the reign of George the Third, every mechanic was bound to the soil by the operation of certain laws. But in this country every journeyman mechanic has the privilege of aspiring, at any time, not only to the condition of a master-workman, but to the highest honors of the land; and his personal freedom, whilst he works no injury to his fellow-citizens, is unrestricted as the winds.

Perhaps no principle ought to be more indelibly impressed upon the human mind than that which recognizes the true nobility of labor. If order be heaven's first law, *thou shalt labor* was heaven's first great commandment. Let no man be ashamed of a hard hand or a sun-burnt countenance. Let him rather exult in the conviction that he carries with him daily the incontestable evidences that he lives, not by fraud, chicanery and speculation, but by the sweat of his brow. Labor is honorable because it is ordained of the Creator; it is honorable, because by it we provide things honestly in the sight of all men; it is honorable, because it adds to the common stock of things, and preserves both the body and the mind in healthful exercise. Labor is to this country what *action* was to the great Athenian orator—it is every thing; and no measure should be put down, by the clamors of sectional prejudice, or by any thing else, which promises to protect or encourage or sustain it.

The greatest men the world has ever produced were working-men. Cato, the celebrated Roman Senator, owned a farm and labored with his own hands. And Peter the Great, Napoleon, Sir Walter Scott and Franklin, were all remarkable, in their day, for the steadiness and intensity with which they labored. Peter the Great actually served an apprenticeship for the purpose of learning the art of ship-building; and Russia, at this very hour, owes more than half her greatness to the genius and industry of this great monarch. Let the winds carry it; let it be told every where and let honest laborers, in all coming time, feel proud when they remember, that the founder of St. Petersburg—the descendant of fierce and warlike monarchs—and the grand moving cause of the renown and prosperity of a mighty empire, was once a voluntary, a lowly tenant of the work-shop. Napoleon, out of twenty-four hours labored eighteen; and during his campaigns, his mind was so vigorous and so well trained, that he could write himself and at the same time dictate to seven Secretaries with regard to matters of the most nontrivial character. Sir Walter Scott, when the sun of his fame was shining in meridian splendor, and when "Waverley" was on every lip, was actively engaged both in writing for the public, and in discharging his duties as High Sheriff and Clerk of a Court in Scotland. And Franklin—who has not heard of him? Who does not know that he was a hard-worker? His was a life of toil and difficulty from its commencement almost to its termination; but armed with honesty, integrity and honor, he pressed forward manfully over all impediments, until he discovered the secrets of lightning, and "wrote his name where all men should behold it, and where all time should not efface it."

And let it not be supposed that there are no laborers but those who toil with their hands. The labor of the mind is as useful and as much needed, at all times and in all countries, as the labor of the body; and one hour of mental effort exhausts the physical powers more than five hours of unremitted manual labor. And those who do not seem to be the multitude to labor—those Poets and Philosophers who live in dusty and dilapidated chambers, as well as those engaged in studying and teaching the severer sciences—confer important and lasting benefits upon society, and are as fully entitled to the rewards of labor, to a comfortable living, and to universal respect and confidence as the most indefatigable laborers in other spheres of life.

Neither let it be supposed that those engaged in the improvement and cultivation of the fine-arts are engaged to no good purpose, or that they do not labor assiduously and severely. Man is a creature possessed not only of reason but of sentiment and imagination; and these faculties, when properly governed and judiciously cultivated, are the essential sources of his happiness. Whoever, therefore, in the fine-arts—in Music, Pointing, Poetry, Sculpture and Architecture—animates or exalts or refines human imagination and human sentiments, labors with intensity and diligence, and at the same time improves society to an indefinite extent. We could live, it is true, without the fine-arts. We could banish the genius of Architecture from our midst—bid the canvass glow no longer—silence the enchanting melodies of Music—and shiver the glittering lyre of the Poet; we could do all this, and still find ample means for gratifying our animal propensities; but in doing so we should destroy the choicest

fruits of civilization and refinement, and cut off from the world every thing which conspires to give it life and vigor and accomplished beauty.

The remark may be true, but it is true, that the highest honors which the country can confer, are within the reach of almost every young man who has had the good fortune to be born within its limits. The road to honor is as open to the son of the mechanic as it is to the son of the Senator; and it is the peculiar glory of this country, that its social and political institutions are so ordered and regulated, as to develop and give scope to genius and talent wherever they exist. The self-taught and the mighty who have gone before us—Davy and Sherman and Sherry—Whittemore, Whitney and Fulton—and all who shine with them in brilliant and happy companionship upon the rolls of fame—what were they but mechanics and the sons of mechanics and of common laborers? And how often have we seen, even in our own time, mechanics and laborers, of pre-eminent natural endowments, casting aside all the impediments which want and poverty have offered to their progress, and ascending, through the fires of envy and tradition, to the highest seats of honor and intelligence? No young mechanic who hears me, has had, or now has, fewer facilities for mental improvement than fell to the lot of Mr. Ewing, the late Secretary of the Treasury. When a youth, he was a salt-boiler—a common day-laborer. And twenty years ago, Mr. Henderson, now a Senator in Congress from Mississippi, was a shop-maker in Illinois. Indeed I might direct your attention to scores, now upon the theatre of action, who enjoy the confidence of States, and who frame laws for the government of this great country, who were, in the outset, penniless, unfriended and alone. And if there is a young mechanic here, who, whilst he honestly and steadily performs his daily duties, looks forward to a higher and a brighter destiny, let me tell him to labor not merely with his hands, but with his head. Wealth may seek him, but wisdom will not. She must be sought, and the vision which would find her must be as keen and as ardent in its glances as the eye of the eagle is to single out its prey. Let him first know himself. And, let him, moreover, always, bear in mind, that there is nothing beneath the sun too trifling to merit his attention; that earth and ocean, the air, and all the stars of heaven, teem and glitter with the mysteries of knowledge; and that these mysteries are to be looked into only by little and little—by patient, long-continued and persevering effort. It is related of the great sculptor, Michael Angelo, that on a certain occasion a friend called on him when he was finishing a statue; some time afterwards he called again; the sculptor was still at his work; his friend, looking at the figure, exclaimed, "Have you been idle since I saw you last?" "By no means," replied the sculptor, "I have retouched this part and polished that—softened this feature and brought out this muscle—given more expression to this lip, and more energy to this limb." "Well," said his friend, "all these are trifles." "It may be so," replied Angelo, "but recollect that trifles make perfection, and that perfection is no trifle."

At a time like this, when confidence between man and man, and indeed between whole communities, is so much broken and impaired—when bankruptcy and distress pervade the country—the mechanic cannot be too cautious with regard to the pecuniary obligations he may be tempted to assume. A judicious system of credit has done and will do much for the mechanic class in this country; but an injudicious one will do infinitely more harm than good. The interest alone of what an individual borrows consumes, gradually, but surely, a large portion of his profits; and he finds too often, when the day of payment comes, that the principal itself has been a dead weight upon his energies, and that getting into debt is but another name for getting into difficulty. (And besides, the debtor is, to all intents and purposes, the slave of the creditor. It is very true that the mildness of the law is sometimes favorable to the debtor, and that it is not easy to imprison an individual unless clear evidences of fraud are disclosed against him; but is he less the slave of his fellow, because the law does not take him into custody? Is there no mental bondage? But it is a fact, and one of which we may justly be proud, that the mechanics of this State are as clear of debt as any other class within its limits. They are men of sound common sense; they know wealth must come to them; if it come at all, by hard blows; and they seldom barter the fruits of their labor for the trappings and garniture of high life. And if all the States in the Republic had more mechanics and farmers, and a less number of that fraudulent class who live upon other men's earnings, we should have more honesty, and less of the abominable doctrine of Repudiation.)

AN APT ILLUSTRATION.

The Washington correspondent of the Richmond Whig gives the following apt illustration of John Tyler: "There is no sensible image that can illustrate the President himself, save one—an ass upon a rail-road, who though warned by the whizz of steam, and the cries and curses of every body in the cars, scarcely pricks up his ears, swears that he'll munch the tuft of weeds he has found there, that the place was made for his diversion, that he is himself the foremost object in creation; and that, in short, it is against his dignity and his conscience to budge one inch." On comes the thundering locomotive, the donkey gets every bone in his skin broken; but the whole train is perspiring through off the track and smashed with the loss of many better lives than that of the jackass.

Virtue is both a title and an estate, a title the most exalted, because it is God who confers it; an estate the most rich, because it endures forever. Envy may not derogate the title, because it is written in the book of Heaven, and fraud cannot diminish the estate, because no sin can reach it.

A TREATY. To settle and define the Boundaries between the Territories of the United States and the Possessions of Her Britannic Majesty in North America, for the final suppression of the African Slave Trade, and for the giving up of Criminals, fugitives from justice, in certain cases.

Whereas, certain portions of the line of boundary between the United States of America and the British dominions in North America, described in the Second Article of the Treaty of Peace of 1783, have not yet been ascertained and determined, notwithstanding the repeated attempts which have been heretofore made for that purpose; and whereas, it is now thought to be for the interest of both parties, that, avoiding further discussion of their respective rights, arising in this respect under the said Treaty, they should agree on a Conventional Line in said portions of the said boundary, which may be convenient to both parties, with such equivalents and compensations, as are deemed just and reasonable; and whereas, by the Treaty concluded at Ghent, on the 24th day of December, 1814, between the United States and His Britannic Majesty, an article was agreed to and inserted in the following tenor, viz: "Art. 18. Whereas the traffic in Slaves is incompatible with the principles of humanity and justice; and whereas, both His Majesty and the United States, are desirous of continuing their efforts to promote its entire abolition, it is hereby agreed that both the contracting parties shall use their best endeavors to accomplish so desirable an object." And whereas, notwithstanding the laws which have, at various times, been passed by the two Governments, and the efforts made to suppress it, that criminal traffic is still prosecuted and carried on; and whereas, the U. States of America and Her Majesty, the Queen of the United Kingdom of Great Britain and Ireland, are determined that, so far as may be in their power, it shall be effectually abolished; and whereas, it is deemed expedient for the better administration of justice, and the prevention of crime within the jurisdiction of the United States, that persons committing the crimes hereinafter enumerated, and being fugitives from justice, should, under certain circumstances, be respectively delivered up: The United States of America and Her Britannic Majesty, having resolved to treat on these several subjects, have for that purpose appointed their respective Plenipotentiaries to negotiate and conclude a Treaty, to the effect, say, the President of the United States, John Tyler, on his part, furnished with full powers, Daniel Webster, Secretary of State of the United States, and Her Majesty, the Queen of the United Kingdom of Great Britain and Ireland, has on her part appointed the Right Honorable Alexander Lord Aberdeen, a Peer of the said United Kingdom, a member of Her Majesty's most honorable Privy Council, and Her Majesty's Minister Plenipotentiary on a Special Mission, to the United States; who, after a reciprocal communication of their respective full powers, have agreed to and signed the following Article:

It is hereby agreed and declared that the line of boundary shall be as follows: Beginning at the Monument at the source of the River St. Croix, as designated and agreed to by the Commissioners under the 5th Article in the Treaty of 1783, between the Governments of the United States and Great Britain, and following the exploring line run and marked by the Surveyors of the two Governments in the years 1817 and 1818; under the fifth article of the treaty of Ghent, to its intersection with the river St. John, and to the middle of the channel thereof; thence, up the middle of the main channel of said river St. John, to the mouth of the river St. Francis; thence, up the middle of the channel of the river St. Francis, and through which it flows, to the outlet of the Lake Pohongamook; thence, Southwesterly, in a straight line to a point on the Northwest branch of the river St. John, which point shall be ten miles distant from the main branch of the St. John, in a straight line, and in the nearest direction; but if the said point shall be found to be less than ten miles from the main branch of the said river, the said dividing line shall divide those rivers which empty themselves into the river St. Lawrence from those which fall into the river St. John, to a point 7 miles in a straight line from the said summit or crest; thence, in a straight line in a course about South eight degrees west to the point where the parallel of latitude of 44 deg. 25 min. north intersects the Southwest branch of the river St. John, as marked by the said surveyors; thence, down along the highlands at the Majumtard portage; thence, down along the said highlands which divide the waters which empty themselves into the river St. Lawrence from those which fall into the Atlantic Ocean, to the head of Hall's stream; thence, down the middle of said stream till the line thus run crosses the point of intersection of the line marked by Valentine and Collins previously to the year 1774, as the 45th degree of north latitude, and which has been known and understood to be the line of actual division between the States of New York and Vermont on one side, and the British Province of Canada on the other; and, from said point of intersection, west along the said dividing line as heretofore known and understood, to the Ironquois, or St. Lawrence River.

It is moreover agreed, that, from the place where the joint commissioners terminated their labors, under the sixth article of the Treaty of Ghent, to wit: At a point in the Neobich channel, near Muddy Lake, the line shall run into and along the ship channel, between St. Joseph and St. Tammany Islands, to the division of the channel at or near the head of St. Joseph's Island; thence, turning easterly, and northwesterly, around the lower end of St. George's or Sugar Island, and following the middle of the channel between St. George's Island and St. Mary's Island, thence, up the east Neobich channel, nearest St. George's Island, through the middle of Lake St. George; thence, west of John's Island, into St. Mary's River, to a point in the middle of that river, about one mile above St. George's or Sugar Island; so as to appropriate and assign the said Island to the United States; thence, adopting the line traced on the maps by the commissioners, through the river St. Mary and Lake Superior, to a point north of Ho. Royal in said lake, one hundred yards to the north and east of the Clapeau, which last mentioned island lies near the northeastern point of Ile Royal, where the line marked by the commissioners terminates; and from the last mentioned point, easterly, through the middle of the sound between Ile Royal and the northwestern main-land, to the mouth of Pigeon river and at the said river to, and through the north and south Fowl Lakes, to the Lakes of the height of Land, between Lake Superior and the Lake of the Woods; thence, along the water communication to Lake Suisagayana, and through that lake, thence, to and through Cypress Lake, Lac Du Bois Blanc, Lac la Croix, Little Vermilion Lake, and Lake Nipicamean, and through the several smaller lakes, straits, or streams, connecting the lakes here mentioned, to that point in Lac le Fluvie or Rainy Lake, at the Chaudron Falls, from which the Commissioners traced the line to the northwestern point of the Lake of the Woods; thence, along the said line to the said northwestern point, being in latitude 49 deg. 23 min. north, and in longitude 98 deg. 14 min. west from the Observatory, at Greenwick; thence, according to existing treaties, due south to its intersection with the 49th parallel of North latitude, and along that parallel to the Rocky Mountains. It being understood that all the water communications, and all the usual portages along the line from Lake Superior to the Lake of the Woods; and also Grand Portage, from the shore of Lake Superior to the Pigeon River, as now actually used, shall be free and open to the use of the citizens and subjects of both countries.

In order to promote the interests and encourage the industry of all the inhabitants of the Countries watered by the River St. John and its tributaries, whether lying within the State of Maine or the Province of New Brunswick, it is agreed that, when, by the provisions of the present Treaty, the River St. John is declared to be the line of boundary, the navigation of said River shall be free and open to both parties, and shall in no way be obstructed or hindered. That all the produce of the forest, in logs, lumber, timber, boards, staves, or shingles, or of agriculture, not being manufactured, grown on any of those parts of the State of Maine watered by the River St. John, or by its tributaries, which fact reasonable evidence shall, if required, be produced, shall have free access into and through the said river and its said tributaries, having their source within the State of Maine, and from the sawpits at the mouth of the said River St. John, and to and

round the Falls of said River, either by boats, rafts, or other conveyance; that when within the Province of New Brunswick, the said produce shall be dealt with as if it were the produce of said Province; that in like manner, the inhabitants of the Territory of the River St. John determined by this Treaty to belong to Her Britannic Majesty shall have free access to and through the said river and its tributaries, in those parts where said river runs wholly through the State of Maine, &c. &c. In order to promote the interests and encourage the industry of all the inhabitants of the Countries watered by the River St. John and its tributaries, whether lying within the Province of New Brunswick, it is agreed that, when, by the provisions of the present Treaty, the River St. John is declared to be the line of boundary, the navigation of said River shall be free and open to both parties, and shall in no way be obstructed or hindered. That all the produce of the forest, in logs, lumber, timber, boards, staves, or shingles, or of agriculture, not being manufactured, grown on any of those parts of the State of Maine watered by the River St. John, or by its tributaries, which fact reasonable evidence shall, if required, be produced, shall have free access into and through the said river and its said tributaries, having their source within the State of Maine, and from the sawpits at the mouth of the said River St. John, and to and

round the Falls of said River, either by boats, rafts, or other conveyance; that when within the Province of New Brunswick, the said produce shall be dealt with as if it were the produce of said Province; that in like manner, the inhabitants of the Territory of the River St. John determined by this Treaty to belong to Her Britannic Majesty shall have free access to and through the said river and its tributaries, in those parts where said river runs wholly through the State of Maine, &c. &c. In order to promote the interests and encourage the industry of all the inhabitants of the Countries watered by the River St. John and its tributaries, whether lying within the Province of New Brunswick, it is agreed that, when, by the provisions of the present Treaty, the River St. John is declared to be the line of boundary, the navigation of said River shall be free and open to both parties, and shall in no way be obstructed or hindered. That all the produce of the forest, in logs, lumber, timber, boards, staves, or shingles, or of agriculture, not being manufactured, grown on any of those parts of the State of Maine watered by the River St. John, or by its tributaries, which fact reasonable evidence shall, if required, be produced, shall have free access into and through the said river and its said tributaries, having their source within the State of Maine, and from the sawpits at the mouth of the said River St. John, and to and

ARTICLE IV. All grants of land heretofore made by either party, within the limits of the territory which by this Treaty fall within the dominions of the other party, shall be held valid, ratified, and confirmed to the persons in possession under such grants, to the same extent as if such territory had by this Treaty fallen within the dominions of the party by whom such grants were made; and all equitable possessory claims, arising from a possession and improvement of any lot or parcel of land by the person actually in possession, or by those under whom such person claims, for more than ten years before the date of each Treaty, shall, in like manner, be deemed valid, and be confirmed to the person by a release to the person entitled thereto, of the right to such lot or parcel of land, so described as best to include the improvements made thereon; and in all other respects the two contracting parties agree to deal up on the most liberal principles of equity with the settlers actually dwelling on the territory falling to them respectively, which has heretofore been in dispute between them.

ARTICLE V. Whereas, in the course of the controversy respecting the disputed territory on the Northeastern Boundary, some money have been received by the authorities of Her Britannic Majesty's Province of New Brunswick, with the intention of preventing depredations on the forests of the said territory, which moneys were carried to a fund called the "Disputed Territory" and the proceeds of the said fund, agreed should be hereafter paid over to the parties interested in the portions to be determined by a final settlement of the boundaries; It is hereby agreed, that a correct account of all receipts and payments on the said fund, shall be delivered to the Government of the United States, within six months after the ratification of this Treaty; and the proportions of the amount due thereon to the States of Maine and Massachusetts, and any bonds and securities appertaining thereto, shall be paid and delivered over to the Government of the United States; and the Government of the United States agree to receive for the use of, and pay over to the State of Maine and Massachusetts, their respective shares of the said fund; and further to pay and satisfy said States, respectively, for all claims for expenses incurred by them in improving the said heretofore disputed territory, by making a survey thereof in 1838; the Government of the United States agreeing with the States of Maine and Massachusetts to pay them the further sum of three hundred thousand dollars, in equal moieties on account of their assent to the line of boundary described in this Treaty, and in consideration of the equivalent received therefor, from the Government of Her Britannic Majesty.

It is further understood and agreed, that for the purpose of running those parts of the line between the State of St. Croix and the St. Lawrence River, which will require to be run and accepted, and for the purpose of settling the line by proper monuments on the last two Articles, the Commissioners, by and with the advice and consent of the Senate thereof, and one by Her Britannic Majesty; and the said Commissioners shall meet at Bangor, in the State of Maine, on the first day of May next, or as soon thereafter as may be, and shall proceed to mark the line as described; from the source of the St. Croix to the River St. John; and shall trace on proper marks a dividing line along said River, and along the River St. Francis, to the outlet of the Lake Pohongamook, and from the outlet of said Lake, to the point of intersection of the line marked by Valentine and Collins previously to the year 1774, as the 45th degree of north latitude, and which has been known and understood to be the line of actual division between the States of New York and Vermont on one side, and the British Province of Canada on the other; and, from said point of intersection, west along the said dividing line as heretofore known and understood, to the Ironquois, or St. Lawrence River.

It is further agreed that the channels in the river St. Lawrence, on both sides of the Long Sault Islands, and of Barnhart Island, the channels in the river Detroit, on both sides of the Island of Bois Blanc, and between that island and both the American and Canadian shores; and all the several channels and passages between the various islands lying near the junction of the river St. Clair, with the lake of that name, shall be equally free and open to the ships, vessels, and boats of both parties.

ARTICLE VII. The parties mutually stipulate that each shall prepare, and maintain in service, on the coast of Africa, a sufficient and adequate squadron, or naval force, of vessels, of suitable numbers and description, to carry in all not less than eighty guns, to enforce compliance with the laws, rights and duties separately and respectively, the laws, rights and duties of each of the two countries, for the suppression of the Slave Trade; the said squadrons to be independent of each other, but the two orders to be officers commanding their respective forces, as shall appear from the description of the vessels, and shall be authorized, upon mutual consultation, as exigencies may arise, for the attainment of the true object of this article; copies of all such orders to be communicated by each Government to the other respectively.

ARTICLE IX. Whereas, notwithstanding all efforts which may be made on the Coast of Africa for suppressing the Slave Trade, the facilities for carrying on that traffic and avoiding the vigilance of cruisers by the fraudulent use of flags, and other means, are so great, and the temptations for pursuing it, while a market can be found for slaves, so strong, as that the desired result may be long delayed, unless all markets be shut against the purchase of African negroes; the parties to this Treaty agree that they will unite in all legal representation and remonstrances, with any and all Powers within whose dominions such markets are allowed to exist; and that they will urge upon all such Powers the propriety and duty of shutting such markets at once and forever.

ARTICLE X. It is agreed that the United States and Her Britannic Majesty shall upon mutual requisitions by them or their Ministers, Officers, or Authorities, respectively made, deliver up to justice, all persons who, being