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## WHO BEGAN THE WAR

A few of our readers at the South are blaming us for supporting the United States government in what they characterize "its unholy war upon the South." If we know our own hearts, we wish to do justice to all concerned, and we will simply ask those of our Southern readers who feel aggrieved because we support the government, "Who began the war?" This is an important question, and should not be answered except by reference to stubborn facts. We will state a few, which cannot be denied. During the administration of James Buchanan, the Secretary of War, John B. Floyd, of Virginia, began the work of depleting United States arsenals in the Northern States, and transferred from a single arsenal 114,000 muskets to Southern arsenals. We have this on the authority of a Richmond paper. These United States arsenals were seized by the State authorities, and the guns put into the hands of the State militia, in many instances while those States were unquestionably in the Union. Large sums of money were appropriated to arm those States—and for what purpose? Will any sane man deny that the object was to use them against the Federal government? If so, let the facts speak for themselves.

In reference to the forts, Joseph Holt, of Kentucky, Acting Secretary of War, in his letter to Mr. Hayne, of South Carolina, who came to demand the retrocession of Fort Sumter to that State, says on behalf of the Federal government, "We are equally opposed to the coercive policy practised by South Carolina, and, after reducing the pretensions of the Federal government to the lowest standard, we are constrained to hold that the United States have at least as much right to be left in the undisturbed occupation of the property which they lawfully hold, as South Carolina enjoys in the undisturbed occupation of that which she holds in contravention of the legal title vested in the Federal government."

We believe all will acknowledge that, so far as the legal title to that fort was concerned, it was vested in the Federal government. The next fact which brings us to the immediate point of war is found in the correspondence of Gen. Beauregard and Major Anderson. At 11 o'clock, p. m., April 11, the former addressed the latter, inquiring "the time at which you will evacuate Fort Sumter, and agree that in the meantime you will not use your guns against us unless ours shall be employed against you." Major Anderson replied at 2½ o'clock on the morning of April 12th, that "I will, if provided with the necessary means of transportation, evacuate Fort Sumter by noon on the 15th inst., should I not receive, prior to that time, controlling instructions from my government, or additional supplies, and that I will not in the meantime open my fire upon your forces, unless compelled to do so by some hostile act against this fort or the flag of my government." Who began the attack? Is it not a fact that General Beauregard opened fire on the batteries of Fort Sumter in two hours after the date of Major Anderson's reply? Who can deny this fact? Certainly no man in his senses. How was this attack received by the government at Montgomery? Mr. Davis was not able to answer the call of the multitude; but his Secretary of War, L. Pope Walker, used the following language:—"No man," he said, "could tell where the war this day commenced would end;

but he would prophesy that the flag which now flaunts the breeze here, would float over the dome of the old Capitol at Washington before the first of May. Let them try Southern chivalry, and test the extent of Southern resources, and it might float eventually over Faneuil Hall itself."

Secretary Walker says the war was commenced that day, April 12th, and, of course, had reference to the attack on Fort Sumter. He furthermore says, and as a high officer at the head of the War Department, the intimation had a marked official significance, that he would prophesy the capture of Washington, for certainly no sane man could ever suppose that he expected to have the Confederate flag float over the Capitol at Washington without first driving out the Federal government, and this could not be done without carrying the war to that city. Furthermore, if it should ever float over Faneuil Hall, it could only be by the subjugation of the city of Boston, to say nothing of any other portion of the North. The Proclamation of the President of the United States was not issued until three days after the attack upon Fort Sumter, and yet in the face of such facts as these, our Southern friends say we are making unholy and wanton warfare upon them. We ask them in all candor, if it would not appear upon the page of history one of the most cowardly things in the world to see a free people tamely allowing their government to be driven from place and power without an effort to sustain it?

## ARMSTRONG GUNS DENOUNCED.—BREECH-LOADING CANNON.

In the London *Mechanics' Magazine* of April 26th, a brief report is published of a lecture lately delivered before the United Service Institution, by Commander Scott, R. N., in which he expressed the opinion that the Armstrong gun will not do for the navy. He corroborated the reports respecting the shot of this gun being defective by the lead bands stripping off. He had seen targets cut to ribbons, not in round holes, but by fragments of the lead from the bands. This occurred in experiments where a screen, placed within 20 yards of the gun, had to be replaced several times. At Devonport he had seen a 100-pound shot fired from the Cambridge gunnery ship with an Armstrong gun, and the lead band went one way while the shot went another. He also stated that in China, the breech screws of the Armstrong guns could scarcely be moved after being out one night in the damp atmosphere. He also asserted that, for short distances, the old smooth bored guns were superior, as the initial velocity of the round shot was about double that of the Armstrong shot.

Commander Scott stated that he preferred plain iron shot in preference to that having lead bands. Nothing, he asserted, could prevent the stripping of the lead casing. He also asserted that, when conical shot was made very long, it was not so accurate as round shot. The long shot do not always fly point foremost, but frequently sideways. In experiments made at Shoeburyness, the target gave evidences of having been struck in this manner. In striking the straight sides of a ship, long conical shot were liable to be deflected at an angle and to glance upwards. It is of great importance, he stated, to obtain a light shell, as the strain upon the gun was in proportion to the inertia of the shot in imparting motion to it. Round shot has the advantage in a rifled cannon at short range. Commander Scott depreciated the use of built-up guns, such as those constructed of several parts, like the Armstrong and Blakely cannon.

The editor of the London *Mechanics' Magazine*, in a leader, refers to this lecture, and asserts that it confirms the position taken by that periodical against the Armstrong gun—that it was defective in construction and inferior to common bronze guns for the purposes of war. It asserts that the British people are being hoodwinked respecting the superiority of this gun, and that Sir William Armstrong has been patronized by government officials, to the great injury of other inventors who had superior guns.

It appears strange to us that artillery and naval officers, who have the most interest in the Armstrong gun, and who have used it, should not have come out and denounced it, if it is so defective as has been represented. They want the best guns which can be obtained, and not such as will be more destructive to themselves in battle than the enemy. If, then, the lead bands of the Armstrong shot are so liable to fly

off and kill friends instead of foes, we would expect the officers of the army and navy who use them to protest against their employment. Thus far this has not been done, which would lead us to infer that the London *Mechanics' Magazine* may be mistaken; but certainly, we believe it has no interest but that of the public to subservise in the position which it has taken, and this gives us some confidence that its editor may be on the right side of the question.

As for the screws of the Armstrong guns being unmanageable, after being exposed one night in a damp atmosphere, this was a very poor argument advanced against them by Commander Scott; a little oil or grease on the screw can prevent all such troubles. And as for the lead bands of the conical shot coming off, this is no fault of the gun but the shot. We believe that lead bands may be cast upon conical iron shot in such a manner that they will not fly off. If we cast the iron base of a conical shot with three narrow deep grooves around it, instead of one broad thin groove, and cast the bands in these, no danger need be feared of their flying off. The bands will form in this case thick rings, and projections may be cast in the iron to hold them from slipping. Good breech-loading cannon and reliable solid shot would certainly be the most effective artillery.

## EXPERIMENTS WITH CANNON AND SHOT.

On Saturday, the 18th ult., by special invitation, we witnessed experiments with a rifled cannon and the expanding shot of Messrs. Hotchkiss, illustrated on page 293 of the present volume of the SCIENTIFIC AMERICAN; also some trials with the breech-loading cannon of Mr. G. W. Bishop, of Brooklyn, the foreign patents for which were secured through this office. The place for conducting the trials was a level plot of ground on the shore of Jamaica Bay, L. I.; it was very favorable for the purpose, but the wind was high and gusty. The cannon used for the expanding shot was a bronze 6-pounder, rifled with a regular twist; but with shallow grooves somewhat broader than the lands, to prevent stripping of the lead. The conical expanding shot weighed 14½ lbs.—8½ more than spherical shot for the same gun; the charge of powder was only 11 ounces, and the distance from the target was 1,300 paces. The firing commenced about 2 p. m., and was continued throughout the whole afternoon. The firing was wide and irregular. This was owing in a great measure to bad powder, strong gusts of wind, and the want of a perfectly level platform for the gun carriage. The shot being so heavy for such a light gun, the recoil was very great; this tended to give unsteadiness to the carriage. A large number of military men and others interested in war implements were present. The great range of the expanding shot with such a small charge of powder, excited the surprise of all present. This is due to the complete absence of windage. The perfect security of the lead bands gave great satisfaction to those who witnessed the trials.

Bishop's breech-loading cannon is a smooth bore iron 12-pounder field piece, similar in form to the Dahlgren guns. The breech piece consists of a conical moveable iron plug, fitting into an opening in the rear of the cylinder. It swings on a vertical axis situated at one side, and it is moved in and out with ease and rapidity by a lever. It is immeasurably superior to the screw and loose plug of the Armstrong gun in being more easily operated. One very ingenious feature in the construction of the breech are a set of expanding dogs, moved by a small screw on the outside of the plug. These dogs are expanded when the breech is closed, and the discharge tends to make them fit more tightly, and completely prevent leakage. On the other hand, they are drawn together when the breech has to be opened, and this permits of its easy withdrawal. Very few shots were fired with this gun, but these were sufficient to show the facility and rapidity with which it could be loaded; it created a very favorable impression.

In Belgium, the government has ordered the construction of some railway carriages for the especial conveyance of sick persons, which contain a suitably-furnished bed chamber, provided with special conveniences for those who may be suffering from broken limbs.

### Position of England.

Some of our cotemporaries are complaining of the attitude of the British government toward the United States in the present unhappy crisis. We confess that we do not fully share in this feeling. We are, in the main, satisfied when we are assured, by royal proclamation, that the government will maintain a strict neutrality, and that the effective blockade by our government of the Southern ports will be recognized and respected. The London *Times*, in reviewing the proclamation of her Majesty, after alluding to the fact of the war, says:—

From acknowledging the state of war the next step is to acknowledge the belligerent rights of the contending parties. One of them, the government of the United States, compelled us to recognize her existence in 1782, and has since, with a brief and unhappy interval of three years, been on terms of amity with us. The other has but just sprung into existence, and, unless Fortune favors, with more than her usual blind caprice, the less worthy cause and the weaker arm, may never be in a position to be recognized at all; but, as belligerents, they are as equal in our eyes as Trojan or Tyrian was in the eyes of Queen Dido. We are bound equally to respect their blockades, and equally to abstain from any act which may violate the conditions of the most impartial and indiscriminating neutrality. Hence arises the necessity of the proclamation which we publish to-day. It may be said to have a double object: First, to warn emphatically all the subjects of the Queen against any breach of the most complete and absolute neutrality; and, secondly, by proclaiming our determination to act with the most perfect fairness between the contending parties, to induce them to treat us in an exactly similar spirit.

Our government, at the time of the "patriotic war" in Canada, did not regard the revolting provinces as belligerents having equal rights. Neither have we offered any encouragement to the insurrection in India and elsewhere. We therefore presume that England, at least, will not regard the United States government as less entitled to respect than the so-called Confederate States of America.

### Official Joking.

JOKE No. 1.—The Committee on Foreign Affairs of the Confederate States, in a recent labored report, perpetrate the following excellent official joke: "Our late associates in the government of the United States have seized the whole of the United States Navy, one half of which belongs to us, and design using it against us." The United States government is actually charged with having seized its own ships!

JOKE No. 2.—The Congress of the Confederate States, through the person of Lawrence M. Keitt, Esq., an ex-M. C. from the State of South Carolina, is asked to extend its protection to the Indians south of Kansas. These Indians live upon United States territory, and are protected by treaties made with the Federal Government. The proposition, therefore, to protect them further sounds very much like a joke.

JOKE No. 3.—Secretary-of-War Walker, of the Confederate States, prophesied that the Confederate States flag would fly over the Capitol at Washington before the 1st of May. A New Orleans journal, noticing the effect of this threat upon the supporters of the government, presumes now that the Secretary was only joking.

JOKE No. 4.—The best joke of all is that Mr. Davis asks "to be let alone." Uncle Sam is expected either to stand on one side and allow Mr. Davis to pass, or to stand and deliver. All he asks is "to be let alone."

### What is Secession?

It is our opinion that the real enemies of the South are those who have stimulated and led on the secession scheme and the war upon the government of the Union. What is secession? This question is thus answered by the committee appointed by the Western Virginia Convention in their Address to the people of that State. It is "a deed," says the Committee, "not to be accomplished in the broad glare of a noon-day sun, but a deed of darkness, which had to be performed in secret conclave, by the reckless spirits who accomplished it, in contempt of the people, their masters, under our form of government, but whom the leaders in this work of destruction have determined to enslave. What is secession? Bankruptcy, ruin, civil war, ending in a military despotism. Prior to the adoption of the Ordinance of Secession in Virginia, and to the passage by the Legislature of the bill calling a Convention, all was peace, and the great business interests of our State were uninterrupted. From the hour that it was proclaimed the Ordinance of Secession had been passed, business of every description has been paralyzed, State, corporation, and individual credit is prostrate, and bankruptcy and ruin stare us in the

face, and war, civil war, with all its attendant horrors, is upon us. Secession, all now see, is war. It is preceded by war, accompanied and sustained by war, ushered into being by war."

### Loyalty in Kentucky.

The Legislature of this State, now in session at Frankfort, passed an act requiring the State guard to take the oath to support the constitution of the United States.

A resolution was also offered that the Governor's proclamation was the true position that Kentucky should occupy during the strife between the United States and the Confederate States, but it was rejected. The position assumed by the Governor amounted, in substance, to a declaration of Kentucky's independence of the United States—a sort of left-handed secession. It would not go down.

Mr. Rosseau made a strong Union speech in the Senate, in favor of sustaining the government. He said he did not consider the Union now dissolved, and he had no fears that it would be. The time had passed for appeals to politicians not to dissolve the Union. Tufts of grass had been tried, and we would now see what virtue there was in stones.

To all appearance the feeling of loyalty to the government is increasing. The following incident recently transpired in the Kentucky Legislature:—

A venerable old farmer from a neighboring county, one of that kind for whom Kentucky has an instinctive veneration, appeared in the Legislative Hall, uncovered his snowy locks and sat down. At the first lull in the debate he rose slowly and said he had a word to say, but was aware it was out of order for him to speak before the Legislature while in session. His dignified and venerable appearance arrested attention, and "Go on," "Go on," from several voices, seemed to keep him on his feet. Again expressing his diffidence at speaking out of propriety—"Hear! hear!" resounded generally over the room. The members' curiosity as well as respect for the appearance and manner of the man was up, and silence followed the "hear! hear!" when the old hero delivered the following eloquent but laconic speech:—

"Gentlemen:—I am delegated by my county to inform you, that if you hold a secret session here, as you threaten to do, not one stone of this Capitol will rest upon another twenty-four hours after. Good day," and he left.

### Non-interference with Slavery.

The Ohio Legislature has adopted, by the constitutional majority, the joint resolution of Congress passed at the last session proposing an amendment to the Constitution of the United States guaranteeing slavery in the States in which it now exists.

This does not look much like interfering with slavery in the States. Such an idea is not contemplated by the supporters of the government. Since the 71st Regiment have been in Washington, the guard have, in obedience to orders, arrested more than twenty fugitives escaping from different points in the South. Several have been returned, and a number are now under arrest, awaiting the appearance of their owners.

Major-General Butler, in command at Fortress Monroe, it seems refused to return some fugitives who fled to the fort for shelter. They were owned by a colonel in the secession army, who demanded them under the fugitive slave law. The general offered to return them if the owner would swear allegiance to the government; otherwise he should recognize them as contraband of war. Slaves have been used by the secessionists to fill sand bags, construct batteries, and we are informed many will fight against the government. General Butler held them, and set them at work.

SOME idea may be formed of the spirit in which the government is going into the war business by a glance at an official advertisement which is published, calling for supplies. Proposals were to be opened on the 3d of June. Among the articles required we find the following:—

Cotton goods, various descriptions, yards.....	1,118,000
Flannel, various colors, yards.....	1,100,900
Cloth, various kinds, yards.....	415,000
Stockings, woolen, pairs.....	200,000
Blankets.....	50,000
Thread, pounds.....	14,000
Bunting, red, white, and blue, yards.....	50,000
Buttons, gross.....	27,000
Canteens.....	60,000
Mess pans.....	25,000
Camp kettles.....	10,000

—together with all necessary tents and tent equipage, axes, hatchets, shovels, spades, pickaxes, &c.

THE London *Times*, on secession, states the South have "the less worthy cause and the weaker arm"

### Cost of the War Forces.

The estimates for the cost of the projected increase of the army are being prepared in the War Department. The pay and clothing of one company of cavalry, amount to \$3,000 a month—of infantry, \$1,800 a month. A regiment of cavalry of twelve companies will cost, therefore, \$1,800 a month. A regiment of cavalry of twelve companies will cost, therefore, \$3,800 a month for pay and clothing, or \$432,000 a year. Subsistence for men, at 30 cents a day, \$109,500. Forage for horses at 50 cents a day, \$162,500. Total cost of one regiment of cavalry for one year, for pay, clothing, and subsistence for men and horses, \$604,000. Add to this the cost of mounting, equipping and arming the regiment—\$235,000—and we have, as the expense of one cavalry regiment for one year, the sum of \$839,100—exclusive of the expenses of the Quartermaster's Department, which will amount to at least \$500,000 more. So that the cost to the government of the new regiment of cavalry for the first year, will not be less than \$1,339,000.

An army of 50,000 men ought to have at least 10,000 cavalry, in ten regiments; the expenses of which, for the year, would be \$13,339,000. The cost of equipping and maintaining the remaining 40,000—divided into artillery and infantry, in the existing ratio of two to five, which would give 11 regiments of artillery and 29 of infantry, would be, for the first year, not less than \$46,000,000—or \$53,339,000. An army of 100,000 men would, therefore, cost the government \$106,678,000 a year. Less than this number will not suffice for our present exigencies.

### What the New Hampshire "National Eagle" Says.

We quote largely, of late, from the *Scientific American*. Its information respecting the material and personnel of the army and navy is accurate and superior, while its energy in promptly illustrating, in the best style of art, anything new, is worthy of all praise. The very week in which Winans' steam gun was captured by Massachusetts troops, the *Scientific American* appeared with an elegant engraving and history of it. Whoever would be thoroughly posted should not fail to take the *Scientific American*.

[Your remarks, Mr. "Eagle," are truthful, and we are going to continue our history of the war with suitable embellishments, believing nothing we can publish will be more acceptable to our readers or useful to the public. We wish you could make ten thousand of your Granite State residents sufficiently appreciate the truthfulness of your assertions to subscribe for our paper.—Ems.]

### Compliment to Our Soldiers.

Henry Addison, Esq., Mayor of Georgetown, D. C., has just addressed a letter to Colonel Corcoran, of the Sixty-ninth Regiment, in which he says:—

It is but an act of justice to your distinguished regiment to say, as I do now, with a great deal of pleasure, that since its very welcome arrival here its members have conducted themselves with a propriety of conduct that has attracted the admiration and respect of the whole community. Indeed, so quiet and unobtrusive have been your soldiers, that, but for their imposing march into our town some weeks since, we should hardly have been aware of their presence. I trust you are aware of our high appreciation of the valor and patriotism which have prompted the Sixty-ninth Regiment to repair here for the defense of our homes, our lives and our capital, and how much we would regret any discourtesy to friends to whom we owe a debt of gratitude that can never be cancelled.

SOUTHERN CORRESPONDENCE.—We publish, on another page, some highly seasoned letters from Southern correspondents. At this particular time they will be found very readable. Our readers will notice that while some of the writers are slightly disturbed in their imagination, the correspondent from Camden, S. C., the hot bed of secession vegetation, is cool and collected, and though reasoning from unfounded apprehension, he still retains his reason, and does not act as if he wanted to kill somebody. Our readers must not wholly judge Southern character from the bellicose standard assumed by friends Whitson and Alderson. We have constant evidence of the patriotic loyalty of many Southern men. They regret this sad secession blunder, and see clearly that they have been deceived by the leaders.

THE DEMAND AND SUPPLY.—Nothing better illustrates the aptness of the American people than their readiness to supply any want for which there arises a general demand. A large proportion of the patents which have been solicited through this office, within the past month, pertain to ordnance and projectiles, tents, and other articles relating to the war.

### Peter the Great in England.

The following extracts from Macaulay's description of Peter the Great's visit to England are taken from the last volume of his history, just published by Harper & Brothers:—

In the same week in which Whitehall perished, the Londoners were supplied with a new topic of conversation by a royal visit, which, of all royal visits, was the least pompous and ceremonious, and yet the most interesting and important. On the 10th of January, a vessel from Holland anchored off Greenwich, and was welcomed with great respect. Peter the First, Czar of Muscovy, was on board. He took boat with a few attendants, and was rowed up the Thames to Norfolk-street, where a house overlooking the river had been prepared for his reception.

His journey is an epoch in the history not only of his own country, but of ours and of the world. To the polished nations of Western Europe, the empire which he governed had till then been what Bokhara or Siam is to us. That empire, indeed, though less extensive than at present, was the most extensive that had ever obeyed a single chief. The dominions of Alexander and of Trajan were small when compared with the immense area of the Scythian desert. But, in the estimation of statesmen, that boundless expanse of larch forest and morass, where the snow lay deep during eight months of every year, and where a wretched peasantry could with difficulty defend their hovels against troops of famished wolves, was of less account than the two or threesquaremiles into which were crowded the counting houses, the warehouses and the innumerable masts of Amsterdam.

The Czar had no permanent minister here. We had no permanent minister at Moscow; and even at Archangel we had no consul. Three or four times in a century extraordinary ambassadors were sent from Whitehall to the Kremlin, and from the Kremlin to Whitehall.

The English embassies had historians whose narratives may still be read with interest. Those historians described vividly, and sometimes bitterly, the savage ignorance and the squalid poverty of the barbarous country in which they had sojourned. In that country, they said, there was neither literature nor science, neither school nor college. It was not until more than a hundred years after the invention of printing that a single printing press had been introduced into the Russian empire, and that printing press had speedily perished in a fire which was supposed to have been kindled by the priests. Even in the Seventeenth century, the library of a prelate of the first dignity consisted of a few manuscripts. Those manuscripts, too, were in long rolls, for the art of bookbinding was unknown. The best educated men could barely read and write. It was much if the secretary to whom was intrusted the direction of negotiations with foreign powers had a sufficient smattering of Dog Latin to make himself understood. The arithmetic was the arithmetic of the Dark Ages. The denary notation was unknown. Even in the Imperial Treasury, the computations were made by the help of balls strung on wires. Round the person of the sovereign there was a blaze of gold and jewels; but even in his most splendid palaces were to be found the filth and misery of an Irish cabin. So late as the year 1663, the gentlemen of the retinue of the Earl of Carlisle were, in the city of Moscow, thrust into a single bedroom, and were told that if they did not remain together they would be in danger of being devoured by rats.

It might have been expected that France would have been the first object of his curiosity. But from some cause which cannot now be traced, he had a taste for maritime pursuits which amounted to a passion; indeed, almost to a monomania. His imagination was full of sails, yardarms and rudders. That large mind, equal to the highest duties of the general and the statesman, contracted itself to the most minute details of naval architecture and naval discipline. The chief ambition of the great conqueror and legislator was to be a good boatswain and a good ship's carpenter. Holland and England, therefore, had for him an attraction which was wanting to the galleries and terraces of Versailles. He repaired to Amsterdam, took a lodging in the dockyard, assumed the garb of a pilot, put down his name on the list of workmen, wielded with his own hand the caulking iron and the mallet, fixed the pumps and twisted the

ropes. Ambassadors who came to pay their respects to him were forced, much against their will, to clamber up the rigging of a man-of-war, and found him enthroned on the crosstrees.

Such was the prince whom the populace of London now crowded to behold. His stately form, his intellectual forehead, his piercing black eyes, his Tartar nose and mouth, his gracious smile, his frown black with all the stormy rage and hate of a barbarian tyrant, and, above all, a strange nervous convulsion which sometimes transformed his countenance, during a few moments, into an object on which it was impossible to look without terror, the immense quantities of meat which he devoured, the pints of brandy which he swallowed, and which, it was said, he had carefully distilled with his own hands, the fool who jabbered at his feet, the monkey which grinned at the back of his chair, were, during some weeks, popular topics of conversation. He meanwhile shunned the public gaze with a haughty shyness which inflamed curiosity. He went to a play; but, as soon as he perceived that pit, boxes and galleries were staring, not at the stage, but at him, he retired to a back bench, where he was screened from observation by his attendants. He was desirous to see a sitting of the House of Lords; but as he was determined not to be seen, he was forced to climb up to the leads, and to peep through a small window. He heard with great interest the royal assent given to a bill for raising fifteen hundred thousand pounds by land tax, and learned with amazement that this sum, though larger by one half than the whole revenue which he could wring from the population of the immense empire of which he was absolute master, was but a small part of what the Commons of England voluntarily granted every year to their constitutional king.

William judiciously humored the whims of his illustrious guest, and stole to Norfolk-street so quietly that nobody in the neighborhood recognised his majesty in the thin gentleman who got out of the modest-looking coach at the Czar's lodgings. The Czar returned the visit with the same precautions, and was admitted into Kensington House by a back door. It was afterward known that he took no notice of the fine pictures with which the palace was adorned. But over the chimney of the royal sitting room was a plate which, by an ingenious machinery, indicated the direction of the wind, and with this plate he was in raptures.

He soon became weary of his residence. He found that he was too far from the objects of his curiosity, too near to the crowds to which he was himself an object of curiosity. He accordingly removed to Deptford, and was there lodged in the house of John Evelyn, a house which had long been a favorite resort of men of letters, men of taste and men of science. Here Peter gave himself up to his favorite pursuits. He navigated a yacht every day up and down the river. His apartment was crowded with models of three-deckers and two-deckers, frigates, sloops and fire-ships. The only Englishman of rank in whose society he seemed to take much pleasure was the eccentric Caermarthen, whose passion for the sea bore some resemblance to his own, and who was very competent to give an opinion about every part of a ship, from the stem to the stern.

The Czar could not be persuaded to exhibit himself at St. Paul's; but he was induced to visit Lambeth Palace. There he saw the ceremony of ordination performed, and expressed warm approbation of the Anglican ritual. Nothing in England astonished him so much as the archiepiscopal library. It was the first good collection of books that he had seen; and he declared that he had never imagined that there were so many printed volumes in the world.

The impression which he made on Burnet was not favorable. The good bishop could not understand that a mind which seemed to be chiefly occupied with questions about the best place for a capstan and the best way of rigging a jury mast might be capable, not merely of ruling an empire, but of creating a nation. He complained that he had gone to see a great prince, and had found only an industrious shipwright. Nor does Evelyn seem to have formed a much more favorable opinion of his august tenant. It was, indeed, not in the character of tenant that the Czar was likely to gain the good word of civilized men. With all the high qualities which were peculiar to himself, he had all the filthy habits which were then common

among his countrymen. To the end of his life, while disciplining armies, founding schools, framing codes, organizing tribunals, building cities in deserts, joining distant seas by artificial rivers, he lived in his palace like a hog in a sty; and when he was entertained by other sovereigns, never failed to leave on their tapestried walls and velvet state beds unequivocal proofs that a savage had been there.

Toward the close of March the Czar visited Portsmouth, saw a sham sea-fight at Spithead, watched every movement of the contending fleets with intense interest, and expressed in warm terms his gratitude to the hospitable government which had provided so delightful a spectacle for his amusement and instruction. After passing more than three months in England he departed in high good humor.

### RECENT AMERICAN INVENTIONS.

*Sewing Machines.*—This invention consists in so applying, combining, and operating the needle and shuttle of a sewing machine, that the shuttle will pass twice in the same direction through every loop of the needle thread that is carried through the cloth, and thereby cause the shuttle thread to be coiled at least once completely round every loop of the needle thread. It also consists in an improvement in the presser, whereby it is made to adapt itself better to irregularities in the thickness of the work. The patentee of this invention is J. P. Sherwood, of Fort Edward, N. Y.

*Mastic Roofing.*—This invention consists, first, in treating gas tar, before it is mixed with the other ingredients composing the roofing, with chloride of lime, under application of heat, in such a manner that the free acids, which are mixed with the tar, and which with ordinary roofing prove very destructive to the canvas, are neutralized, and at the same time the tar is deodorized, and the bad smell generally arising from mastic roofing is obviated; second, in mixing gas tar previously treated with chloride of lime as stated, with black oxyd of manganese, plaster-paris, alum and charcoal, and applying this composition to canvas, after the same has been properly fastened down to the roof. The inventor of this device is Cornelius C. Hoff, of Poughkeepsie, N. Y.

*Strawberry Basket.*—This invention relates to an improved basket such as is used for conveying strawberries and similar fruit to market, and in which they are generally sold. The object of the invention is to obtain a cheap, and at the same time a more durable basket than those constructed of wood splints in the usual way, and which will admit of being stowed away more compactly, both when filled and empty. The invention consists in constructing the body of the basket of thin sheet metal, cut by means of suitable dies to form ribs or splints, and bending the same at their lower ends, so that they will, in connection with circular disks, form the bottom of the basket, the top of the basket being provided with a swinging or bail handle. S. R. Wilmott, of Brooklyn, N. Y., is the inventor.

*The shuttle Motion of Power Looms.*—This invention relates to the employment for keeping the movement of the operating point of the picking stick in, or as nearly as desirable, in a line parallel with the raceway, by means of a rocker attached to the bottom of the stick and a bed at the bottom of the lay. The improvement consists in a certain novel construction of the rocker, and the part of the lay which contains the bed on which the rocker works, whereby the liability of the parts to break, get out of repair, or become displaced, is in a great degree obviated. The inventor of this device is William Nugent, of Chicopee, Mass.

*Carriages.*—This invention relates to a novel and improved way of combining the elliptic and C-spring, and attaching or applying the same to the hinder parts of carriages, whereby a requisite degree of elasticity is combined with strength, and a very neat and chaste carriage obtained. In the construction of carriages, style, ease in riding, and lightness combined with strength are the essential desiderata to be attained. The two latter requisites for city carriages are not very readily obtained, as the stone pavement is the source of concussions and great wear and tear, even with moderate driving. By this invention it is believed that the above named requisites are fully obtained, and by a very simple and economical arrangement. Charles B. Wood, of New York city, is the inventor of this device.