

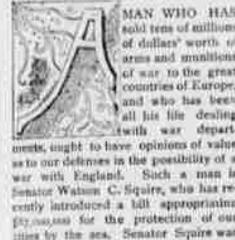
TRUTH AND LIBERTY.  
SATURDAY, JANUARY 4, 1896. SALT LAKE CITY, UTAH.

**OUR CITIES BY THE SEA.**

Senator Watson C. Squire, ex-President of the Remington Rifle Company, Tells How To Defend Them.

What His connection With the Foreign War Office Has Taught Him—How John Bull Missed Out Our Secrets—England Has Plans of Our Harbors and How They Attack Them—Her Fortifications on Vancouver's Island and How They Control Puget Sound—The Columbia River and Portland—How San Francisco is Defended and the Dangers of New York—Fifteen Hundred Cannon Needed—Improvements in Modern Warfare—Explosives Which Kill by Shell and Gas Which Run Shot and Shell—Torpedoes and Torpedo Boats—What Great Wars Cost and How Germany as Well as France Led by Her Late War—Small Arms and How They Can Be Turned Out.

Special Correspondent of the NEWS.  
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Washington, January 3, 1896.



**A MAN WHO HAS** sold tens of millions of dollars' worth of arms and munitions of war to the great countries of Europe, and who has been all his life dealing with war departments, might have opinions of value as to our defenses in the possibility of a war with England. Such a man is Senator Watson C. Squire, who has recently introduced a bill appropriating \$10,000,000 for the protection of our cities by the sea. Senator Squire was chairman of the coast defense committee some years ago, and since he was elected to the Senate he has been devoting himself largely to matters connected with the army and navy. He was for many years connected with the Remington Manufacturing company and has made a large fortune in dealing in firearms and munitions of war. He was for a long time the agent of the Remington company in Europe, and was at one time its president. At the time of the Franco-Prussian war he sold more than \$14,000,000 worth of small arms to the French. He tells me that the French thought they were well prepared for this struggle, but that after it had begun they found they could nowhere get enough arms for their soldiers. Among those which they bought of Senator Squire were a large number of rifles and guns left over from our late civil war. The Senator purchased nearly \$10,000,000 worth of such guns from

Uncle Sam and sold them to the French. He has also furnished guns to officers of the great European nations. He sold over \$5,000,000 worth of guns to the Spanish and he aided in supplying the Mexicans with firearms. For years his business was in connection with the war offices of all the great European nations, and he could today draw maps of the streets of St. Petersburg and Constantinople from memory. A great part of the guns now in use in South America were sold by him. This is the case with Cuba and to a large extent with the Argentine Republic and Venezuela. I do not think that the Senator has at present any active connection with the Remington company. His long experience, however, has given him a good opportunity to learn much as to the inside workings of war matters in Europe, and especially as to the plans of other nations relating to this country.

**JOHN BULL MISSING OUT OUR SECRETS.**  
During a chat with him last night I asked Senator Squire whether he supposed that the English had an accurate knowledge of our secrets. He replied: "Certainly they have. The British legation has a man connected with it whose business it is to look into and report to the British war office upon such matters. The English probably had men traveling through the United States getting the last and best information upon all matters connected with our army and navy and defenses. You cannot imagine the amount of money that foreign nations spend upon such things. A new gun or a new invention in any kind of arms is worth a fortune if it is of real value, and governments sometimes buy such inventions and keep them secret until the time comes for their use. Our war department probably has much secret information as to arms and ammunition which will not be developed until a war occurs. We send them abroad to report upon such matters. The results of their investigations never get into the newspapers, and you cannot tell what new things have been invented for warfare until war actually occurs. In the war

of 1866, in which Austria was conquered by Prussia, the Prussians succeeded largely on account of the German 'needle gun,' which up to that time had been kept secret. It was a great thing at that time, and it allowed the Prussians to get the powder to escape in such a way that it had to be fired from the right instead of the shoulder. Still it was a great improvement over the old Austrian gun and over anything Europe then had. It was first used in that war and at the battle of Sadkova it gave the Prussians a victory. After this battle all Europe rushed to get new guns, and the wonderful small arms which we have today are the result. It was the same during our civil war. The fight of the Monitor and the Merrimack changed the naval construction of the world. Before that wooden ships were used nearly everywhere. After it gun-boats had to be made of iron and steel, and the big armament which now cost from three to five million dollars apiece, and the costly armor plate with which they are sheathed are the result.

**PLANS OF OUR SEAPORTS IN THE BRITISH WAR OFFICE.**

"Speaking of the English knowledge of our secrets," Senator Squire went on, "I have no doubt but that a plan of every harbor and city on the Atlantic and Pacific coasts is in the British war office. These are revised from time to time in accordance with every new piece of information which they get concerning our defenses. I venture to say that the British war office has a better knowledge of the real condition of our seacoast cities than the Congress of the United States. In all probability the English have their plans made out in detail as to where they will attack each of our cities in case of a war, and it may be that the letters and telegrams are already written giving directions to the commanders in the different branches of the army and navy as to just what they are to do in such a case. This is so in nearly every big war office in Europe. Every possibility is provided for. You remember the story of Von Moltke, the commander-in-chief of the German army at the time that the Franco-Prussian war occurred. The announcement that war had been declared by Napoleon was received at night, and the messenger bringing the news found Von Moltke sound asleep. He was awakened and advised of the fact. He did not rise, but merely sent for his aid and told him to go to a certain case and take the papers out of a certain pigeon hole and telegraph the instructions therein enclosed. These instructions gave directions as to the disposition of every part of the German army. After giving this order, so the story goes, Von Moltke turned over and went to sleep, knowing that when he awoke in the morning the whole German army would be preparing to move. The English probably have similar plans for the action of their forces and fleets."

**ENGLAND'S FORTIFICATIONS.**  
"What is the condition of the English fortifications on this side of the water," Senator Squire asked.  
"I don't think any one knows," replied Senator Squire. "They are pro-

hably in a very good condition. The English have been steadily increasing their fortifications about the United States for years. They have, I have seen it stated, so dredged the St. Lawrence river that war ships drawing twenty-six feet can now sail right up to Montreal, which, in the days of a war with us, would be one of their bases of supplies. They do not allow Americans to go through their forts. Not long ago my secretary, Carl Hilder, who was formerly connected with the English army in India, was visiting some officers near Esquimaux on Vancouver's Island. He asked to be taken through the fort there, but was told that it would be impossible, as orders had been given that no one outside of those immediately connected with the fort were to be allowed within it. This great English fortification practically controls the straits of Fuca and the entrance to Puget Sound. It is within a few miles of our coast. Port Townsend is just across the way, so near, indeed, that the morning and evening guns from the fort may be heard there. Gen. Miles, who has examined closely into the subject, says that in twenty-four hours the British fleet at Esquimaux could take possession of Puget Sound and destroy its cities and towns. We ought to have at least 200 guns and more on Puget Sound, and there should be 100 guns and mortars on the Pacific coast to properly protect it."

**THE UNDERGROUND WEST.**

"But San Francisco is well protected, is it not?"  
"By no means as well as it should be," replied Senator Squire. "It is the only Pacific coast port that is at all provided with means of defense. Battle and Tacoma and the ports of Puget Sound could be easily destroyed. San Diego is defenseless. The great Columbia river is practically open to foreign war vessels. They could sail up and destroy Portland. They could send smaller boats further and ruin the canal which we are building about the Cascades, and upon which we are spending millions of dollars. We ought to have a gun factory on the Pacific coast. We have coal and iron, and we could as easily build gun ships there as in the east. I have introduced a bill appropriating \$1,000,000 for such a factory."

**FIFTEEN HUNDRED CANNON NEEDED.**

"How many guns are wanted altogether for coast defense," Senator Squire asked.  
"It is estimated," replied the Senator, "that it will take at least 2,500 cannon, that is, guns and mortars, to give us the proper protection. At least half of these should be eight, ten, twelve and sixteen-inch guns, and the remainder should be mortars. These guns need carriages, machinery and fortifications, behind which they can be raised and lowered. It will take at a low estimate at least \$10,000,000 to put the ports in the best shape, and my bill proposes that this expenditure be begun and carried on until it is completed."  
"This expenditure ought to begin at once," continued Senator Squire. "There is one thing the people do not seem to understand, and that is that it takes time to build the great modern

guns. The contract was awarded to one of the great American companies for building one hundred guns in that. It is now this and they have only twenty guns which are any where near complete. There are, I believe, some in actual use, though some are ready for trial. In building great guns, works have to be made for them, and the actual construction of the guns requires months. As far as earthworks and defenses, they could be received in a short time by putting a large number of men at work, but it takes time to make all kinds of arms and munitions of war. As to small arms, they can be turned out very rapidly. During the Franco-Prussian war the Remington works made twelve limited new rifles a day. They made two hundred revolvers a day in addition to remodeling two hundred other guns, making an output of sixteen hundred small arms every day. This was, I believe, the fastest work of the kind that has ever been done."

**THE DANGERS OF NEW YORK.**

"Speaking of our sea coast cities, Senator, New York is well defended, is it not?"  
"No," was the reply. "It has only about one-tenth the protection that it should have. The other cities on the Atlantic are practically defenseless. I visited the defenses of New York not long ago. Our principal works are situated at Sandy Hook, where we have two guns and sixteen mortars. The guns are twelve-inch guns. They carry projectiles weighing over seven hundred pounds and it takes four barrels of powder for a single fire. They have a range of twelve miles, and they are only exposed at the time of firing. They are protected by an emplacement of fortification made of cement and sand. The strength of this fortification is equal to that of 150 feet of sand, and it is so great that no modern gun can send a projectile through it. The gun are loaded behind it, and fired by hydraulic pressure and are raised and fired. Twenty-one seconds later they have dropped into the water, the fortifications ready for reloading. In addition to these guns we have sixteen mortars at Sandy Hook. These send shells of cast-iron and steel weighing from five hundred to a thousand pounds a distance of six miles. They are fired from a pier, and they shoot their projectiles two miles up into the air. If a twelve-inch gun knows as the range finder they have been known to be very accurate in their aim. By this invention it is ascertained at just what angle the gun should be shot. The gunners of those who fire them have a map of the sea or the harbor before them, and this map is divided up into squares. It is found in which square the man-of-war is at the time of firing. The sixteen mortars are then trained upon that square and a rain of their massive shells will fall upon it. It would be strange, indeed, if some of them did not hit her and carry her to the bottom."

**TORPEDOES WILL NOT DO.**

"How about torpedoes? Why cannot all of our coast cities be protected by them?"  
"There is little safety in depending upon torpedoes," replied Senator Squire. "and it is not everywhere that you can use them. The idea is, you know, to fasten them to a wire or rope. A strong current would, in such case, carry them to the top of the water, where they could be seen. If the water were very deep, they would not be effective, and, then, there is always the danger to our own boats. Some of the Chinese ships were, you know, blown up by their own torpedoes. They could probably be used for the defense of New York, Philadelphia, Baltimore and Washington. They could also be used for places like Portland, Oregon, but they would not be of much value in an open harbor. Besides, the guns of these big war vessels carry six to twelve miles. They can stand out at sea and shell the cities. The best way to repel them is by coast defenses, supplemented by our navy."

"How about torpedo boats?"  
"That is a matter that comes under the navy. Such boats would undoubtedly be of great value, and they will be largely used. All the great nations are adding torpedo boats to their naval forces. England has a large number, and is building more. France, Germany and Russia all have scores of torpedo boats. The advantage of such vessels is that they can be built quickly and that they are comparatively cheap. We can go faster than the man-of-war. We are now building at Seattle a torpedo boat which will make twenty-nine miles an hour. It will be the fastest torpedo boat of the world."

**THE COST OF WAR.**

"I suppose the next great war will be the most costly of the wars of history," Senator Squire said.  
"Yes," was the reply. "A number of our battle ships have cost between three and four millions of dollars. We appropriated \$5,000,000 for two such ships last year. It costs an enormous amount to run these ships in time of peace, and a half hour's naval action will eat up a fortune. The cost of the wars of the past have been enormous, according to an estimate of French and German statisticians, which I have lately seen, the wars of the last thirty years have cost the world more than \$13,000,000,000 in money and the loss of 4,000,000 men. France paid more than three and a half billions for her war with Prussia, and it is estimated that the next war cost the Germans \$50,000,000 more than the indemnity which they received. The Crimean war cost about two billion dollars, and the war between Prussia and Austria of 1866 cost over three hundred million. The war between Russia and Turkey is estimated to have cost one hundred and twenty-five millions of dollars. I believe that a war between England and the United States if it should ever occur, would result in a greater loss of money and life than any of the wars of the past and I sincerely hope that such an event will never take place. I believe, however, that it is our duty to be prepared for such an event, so that when the fight does come we will be able to defend our honor and ourselves."

**NEW THINGS IN WARFARE.**  
"But Senator, would there not be a number of new things brought forth by our people in the event of a war with Great Britain?"  
"Speaking of new inventions," replied Senator Squire, "there are being made all the time. The rapid firing gun has changed warfare to a large extent. Some of these will send shells weighing ten pounds at the rate of six to the minute, and there are guns which throw streams of projectiles like water from a hose. One of the Maxim guns discharges rifle bullets at the rate of 900 a minute, and by the machines now connected with the big man-of-war continuous streams of cartridges can be sent out from one gun managed by two men. One item of the Gatling gun shoots 1,200 shots a minute. These rapid firing guns were used during the fight between the Japanese and Chinese. Ships within a mile of each other were exposed to a hail storm of shot and shell from them. The enormous power of the armor of the ships was shown in this war. The twelve-inch guns of the Japanese, though they sent projectiles weighing 500 pounds, could not sink the Chinese battle ships, and we are now making thirteen inch guns, instead of twelve inch guns, for our man-of-war. The shells from such guns have an enormous penetrating power. The powder used in the Chinese-Japanese war was largely smokeless powder. We are making improvements in powder right along, and

new inventions are being made in all kinds of munitions of war.  
**EXPLOSIVES WHICH KILL BY SOUND.**  
"The next war will determine many new things as to high explosives," continued Senator Squire. "There is an explosive known as melinite, which is said to have some of the properties of the old stick pot used by the Chinese. I recently read an account of the use of this explosive. The article stated that the stuff was three times as powerful as gunpowder, but that its fumes were even deadly. It cited an instance in which a melinite shell had exploded on a vessel on which were some sheep and goats. All of the animals not killed by the shell were suffocated to death. Then there is emantite, which is another high explosive of wonderful power, and there is a material called explosive gelatin, said to be fifteen times as strong as gunpowder. There are numerous other means of defense than those which I have spoken of which might be adopted as to our seacoast cities. There is no telling what new war inventions may be made in electricity. Mines under the waters could be exploded by this means upon the approach of war vessels, and there are other ways, it is said, in which electricity could be used. It is practically a new science, and in enormous force will be largely developed by the wars of the future."

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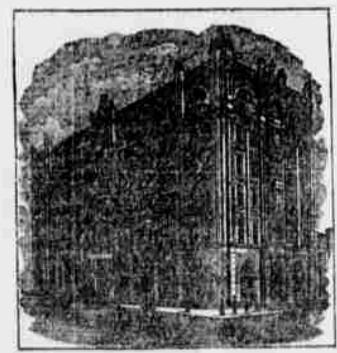
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