
WONDERFUL DEVELOPMENT

OF

Peter the Great's Pet Projects,

AS OUTLINED IN

His Last Will and Testament.

.....

AMERICAN INVENTION

AS AN

AID TO RUSSIA'S GRASP

ON ASIATIC TERRITORY.

.....

BY W. GANNON.

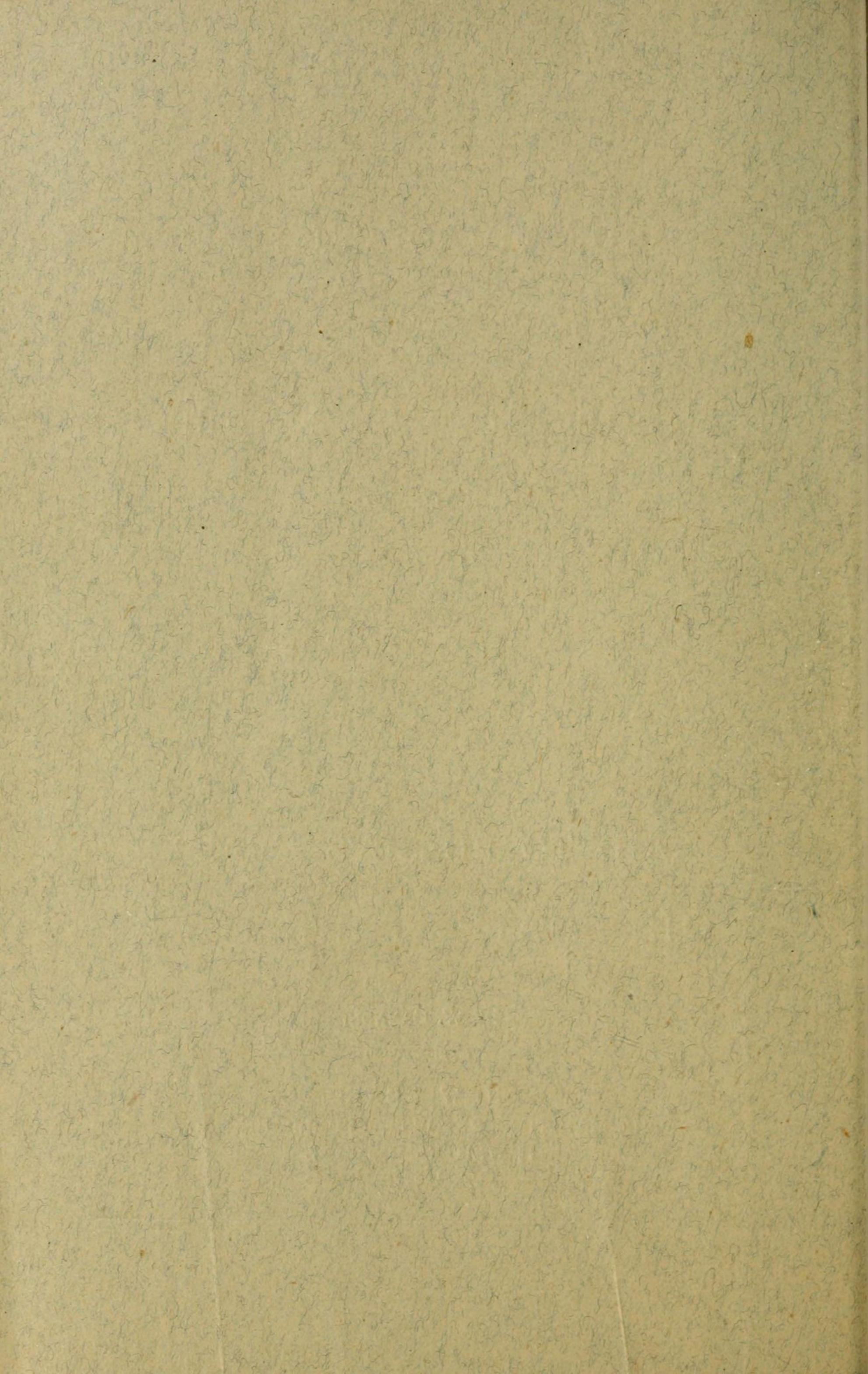
.....

NEW YORK:

THE MARITIME REPORTER PUBLISHING CO.,

15 WHITEHALL STREET.

1889.



WONDERFUL DEVELOPMENT

OF

Peter the Great's Pet Projects,

ACCORDING TO

His Last Will and Testament.

.....

AMERICAN INVENTION

AS AN

AID TO RUSSIA'S GRASP

ON ASIATIC TERRITORY.

.....

BY W. GANNON.

.....

NEW YORK:

THE MARITIME REPORTER PUBLISHING CO.,

15 WHITEHALL STREET.

1889.

PROGRESSIVE RUSSIA

ON THE

March to Constantinople.

AN AMERICAN INVENTOR THE ALLY OF THE MUSCOVITE.

Peter the Great may justly be credited with having been the greatest civilizer of his race. To him is due the credit of nationalizing his country and inaugurating vast industries, through the medium of the Ship. So far in advance of his time was he that his startling innovations and wonderful discounting of the arts of diplomacy must have endangered his head had he not been fortunate enough to have been born a despot.

Peter's last will and testament outlined the policy to be pursued by his successors, looking to the aggrandizement of Russia, and startling though its terms are in their selfishness, they are so thoroughly diplomatic that his successors have religiously lived up to their full meaning.

And so it comes to pass that the ever-advancing and constantly-tightening grasp of Russia on adjacent territory is alarming the Governments of the Old World and may, indeed, in the near future, somewhat concern ourselves. The Canadian Government is now urging Great Britain to erect defences on the Pacific Coast, for the reason that Russia, in pursuance of her peculiar policy, is enlarging her works and arsenal at Vladivostock, opposite British

Columbia; and the initiative has already been taken by Great Britain in the erection of batteries in the neighborhood of Esquimaux.

As early as last May the St. Petersburg correspondent of the *New York Tribune* contributed the following report of the progress of the Grand Trunk Railway through Central Southern Siberia to the Pacific Ocean and China:

“SIGNS OF RUSSIAN PROGRESS.

“The completion of the Trans-Caspian Railway to Samarcand marks another stage in the Russian occupation of Asia. That city was the objective point of the earlier campaigns from Orenburg and the sea of Aral, which ended in the conquest of Khiva and Kokan and the establishment of Tashkend as the military headquarters, with railway connections northward. Bokhara was reduced to the condition of a protected province and Samarcand was virtually converted into a Russian centre of trade on the border of China. An interval of twelve years has elapsed, during which Samarcand, already within easy reach from Tashkend, has been gradually approached from the Caspian Sea. The Trans-Caspian Railway is now in operation from Michailovsk to Samarcand, a distance of 885 miles, by way of Askabad, Merv and Bokhara. This narrow-gauge system, built at a cost of \$21,000,000, gives Russia control of the commerce of Turkestan and completes the circuit of conquest on the borders of China, Afghanistan and Persia. In future military operations in Central Asia this railway, with the northern line running from Tashkend, will be a most useful base of transportation and supplies. Meanwhile, it binds together a straggling series of conquests separated by broad reaches of desert. It is already rumored in St. Petersburg that the Czar intends to visit during the summer the great Empire in Central Asia which the valor of his soldiers and the skill of his engineers have created. An imperial journey to Merv, Bokhara and Samarcand will illustrate the wonderful progress made by the Russians during the last twenty years in overrunning Asia.

“The Russian engineer who has completed the Trans-Caspian system is now to undertake a new and colossal undertaking. This is the trunk line through Central and Southern Siberia to the Pacific Ocean. Surveys have already been made for a railway from Tomsk to Irkutsk, and this line when

finished is to be extended to Vladivostock, on the coast. As the Trans-Caspian now makes a close approach to Western China, the Siberian will complete the circuit of the Celestial Empire on its northern border. If the consent of the Chinese Government can be obtained, branches will be built from Irkutsk to Peking, Shanghai, and other centres of population. Within five years it is expected that this gigantic enterprise will be accomplished and St. Petersburg brought into direct communication with Vladivostock. The journey from the capital to the Pacific can then be made in a fortnight; and if Chinese markets can be opened to Russian traders, a marvelous change in the conditions of Asian commerce and intercourse will be effected."

And only a few weeks ago the same journal printed the following, as a sequel to the above :

"The announcement that Russia's Central Asia railroad system is to be greatly extended was to be expected. At present it reaches to Samarkand and already more than pays working expenses. Every branch or further extension of the main line will, of course, add materially to its traffic and its profits. It is now proposed to build a branch from the main line at Chardjui, on the Oxus, to Chamiab, and also to continue the main line onward from Samarkand to Tashkend. The latter would cross the Jaxartes; and thus the road would give direct communication with both the great rivers that flow into the Aral Sea, just at the head of navigation on them, and would connect the commerce of the Aral with that of the Caspian. Just beyond Tashkend begins a series of steppes adjoining those of Siberia, whither Russian colonists are flocking. The road thus promises to be of equal importance to commerce and to military strategy."

THE FIRST STEP.

The occupation of Asia, so long determined on by Russia, was a problem most difficult of solution. Many years were spent in devising ways and means to navigate the Aral Sea—the first thought being to transport machinery and material for the construction of steamers over the mountains—a project which was at length abandoned as impracticable.

But a solution was at hand. In the year 1860 a novel system for the construction of vessels was introduced in Great Britain by an American, through whose efforts a Company was formed and an extensive factory established at Liverpool. This Company, on proof of the value of its system of construction, secured a contract with the British Government to construct a number of steamers for the East India Company, of Bengal—Moorshedaba.

As an evidence of the financial solidity of this company, and the class of men who invested their capital in that concern, it may be mentioned that Sir Charles Manby, the great English civil engineer, was President, while such men as Sir Robert Stephenson, President of the Institution of Civil Engineers, and John Hamilton, also well-known as an eminent engineer, were members and stockholders. The entire capital and membership of the Company belonged in London—Liverpool simply being selected as a factory site.

The steamers under course of construction by this Company were 150 and 200 feet long, built on the new system of

CORRUGATED GALVANIZED IRON,

three-sixteenths of an inch in thickness. By this system the weight of hull of a vessel was reduced one-third and the draft reduced in proportion, while the strength was increased two-fold by means of the corrugations covering the entire outer surface of the hull, which corrugations take the place of *frames* or *timbers*, thus increasing the interior capacity of a boat of given draft while vastly increasing her strength. The great utility and superior qualities of this mode of construction was fully demonstrated by the building of several supply boats for the British Navy, as well as military wagons for the Army, and other constructions on the same principle for miscellaneous purposes. The steamers built by this company were so constructed that they could be

DISJOINTED AND TRANSPORTED IN SECTIONS,

being so arranged that they could be set up and taken apart with the utmost celerity, and without the aid of more than passable shipbuilding or mechani-

cal knowledge. This unique and valuable system of ship construction was invented by Joseph Francis, an American born, and justly celebrated as founder of the United States Life-Saving Service, for which, at a late day, he received the

THANKS OF CONGRESS AND IS TO RECEIVE A GOLD MEDAL.

Information of this system of construction reached Russia after its value had been proved by the American, English, French, Austrian and German Governments, and Mr. Francis was invited to visit that country, where he was received by the Emperor.

In 1860, Admiral Boutakoff, of the Imperial Russian Navy, was ordered by the Emperor to proceed to Liverpool and examine the system of construction, with a view to its applicability to service on the Aral Sea, in Asia, and report as to its utility. From documents placed in possession of the writer, he is enabled to present a copy of the Admiral's Report, as follows:

“LIVERPOOL, 15th November, 1860.

“HONORED SIR: I have sent to the Scientific Committee of the Marine Ministry, with my reports of the 15th and 17th of October, for publication in a marine journal, a short article concerning the corrugated iron steamers. In addition to information therein contained, I would state that it is my conviction that for our rivers, which are from year to year getting more shallow, there cannot be built a more suitable steamer than the above. In the discharge of my duty, I communicate to you the result of the trials which have been made at the Liverpool factory.

“The corrugation of sheets of iron is effected, as may be known to you, crosswise and not lengthwise, and the sheets of the hull are riveted together by lapping one upon the other, corrugation upon corrugation, and a double row of rivets put in.

“It was important to ascertain the relative strength of the riveted lap to a whole sheet before proceeding with the construction of the steamers. For that purpose we placed upon two blocks a riveted sheet *a a* (as marked in the diagram accompanying this), three feet ten inches in length by two feet six inches wide and three-sixteenths of an inch thick. We then began by

laying on it, directly over the line of the rivets, zinc slabs, *b b*, each weighing thirty-one pounds English.

"The sheet broke at one row of rivets after having placed upon it 188 slabs, or 160 poods of fourteen pounds each (nearly three tons); after this test a whole sheet of the same measure was placed upon the blocks, and it bent after 199 slabs or 170 poods, (over three tons) had been placed upon it.

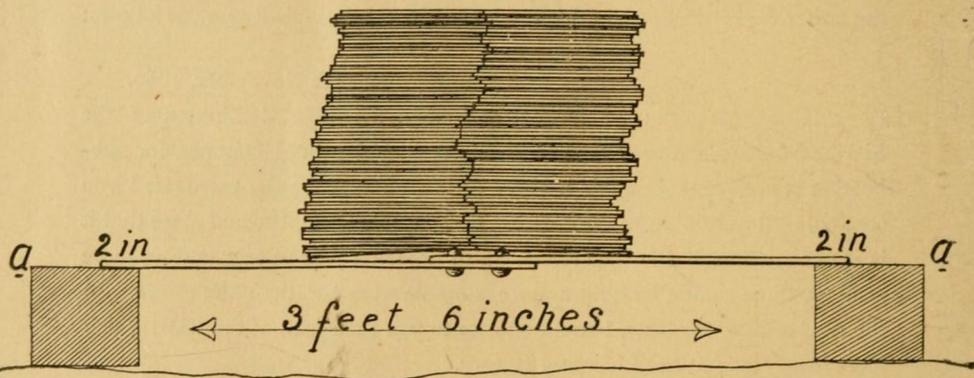
"Finally we took a plain sheet of iron the same measure, not corrugated, and it bent and fell from the blocks after ten slabs had been placed upon it. I believe that such results settle the question in regard to the local strength which corrugation imparts to iron and its adaptation in the construction of vessels.

"With sincere regard,

(Signed.)

"ALEXANDER BOUTAKOFF.

"TO ADMIRAL ARKASS."



TEST OF CORRUGATED IRON LAP MADE IN LIVERPOOL BY
ADMIRAL BOUTAKOFF, R. I. N.

On a call from the Russian Government, the inventor submitted photographs and drawings of the steamers constructed by the Liverpool Company, addressed, according to instructions, to the Grand Duke Constantine.

After some little necessary correspondence, shorn of all diplomatic red tape, a contract was entered into between the Imperial Government and

Mr. Francis, for the construction of a fleet of light-draft steamers, to be pushed to completion rapidly as possible. The result was that, ere the year 1862 had passed, steamers, fully engined, and ready for service, were erected at the Liverpool factory, and taken apart again for shipment. These vessels were 150 to 200 feet in length, built on similar lines to vessels already constructed by the Company. When the steamers had been put together, tested and again set up at the factory, they were boxed for shipment, in sections, both hulls, floating dock and machinery, when they were ready for

THE STRANGEST ROUTE EVER TRAVERSED BY SHIP.

From Liverpool they went first to St. Petersburg—thence to Moscow—on to Nijni Novgorod—across the Volga—over the Ural Mountains—to the Aral Sea, in Asia—where they were at length unboxed, the sections once again put together and, lo, a

PROUD FLOTILLA GRACED THE ARAL,

upreared as if by magic hands. This was the initiative in Russia's grandest Dream of Empire. These vessels had crossed the Aral barrier, and swooped down like things of life on the insulated sea, the inhabitants of whose shores fondly dreamed they dwelt secure in Nature's fastness. Impossible would it have been to transport vessels in their entirety over the rugged heights, and deadly impracticable would it have been to attempt their construction on the Aral seaboard, in full view of an alert and suspicious people.

Here it may be well to introduce three letters, the originals of which are in possession of the writer, and which are fully corroborative of the preceding statements.

“ To His Imperial Highness the Grand Duke Constantine :

“ I beg leave to present to Your Imperial Highness lithographs of the two corrugated galvanized iron steamers, built at Liverpool for the Syr Dariah River, under the supervision of Captain A. Boutakoff, of the Russian Imperial Navy.

"The two steamers, together with one barge and a lifting dock, are finished, ready for shipment. Captain Boutakoff left Liverpool March 25 (13th).

"Your Imperial Highness' humble servant,
(Signed.) "JOSEPH FRANCIS."

"MARINE MINISTRY OF THE SHIPBUILDING DEPT.,
March 31, 1861—No. 189. }

"To Mr. Joseph Francis :

"The letter which you addressed to His Imperial Highness the Grand Duke, General Admiral, on the 25th March, with which you presented to His Imperial Highness two drawings of corrugated iron steamers, has been sent to this committee, with a resolution from the Ministry of Marine, stating that His Imperial Highness desired his thanks to you. The committee has the honor to inform you thereof.

"Manager, BELLARMSKY. "THE PRESIDENT.
(Signed.) "Major-General CHERNOFSKY."

(Letter from Admiral Boutakoff to Mr. Francis.)

"FORT NO. 1, SYR DARIAH, July 2, 1862.

"DEAR MR. FRANCIS—The new steamers of my flotilla, built at your works at Liverpool, are not yet launched, but I hope to accomplish it in about a month. The boilers, on account of the great difficulty of transporting them across the Desert, will not arrive before the middle of August, so that I shall not have sufficient time to employ the new steamers this year, but will give them a trial upon the Syr Dariah. The parts of the pontoon dock will be here about the end of August, giving us time to put them together next winter.

"With a hearty shake hands, and my sincere sympathies with your northern countrymen, of whose victories I congratulate you,

"I remain, yours most truly,
(Signed.) "A. BOUTAKOFF."

On the launching of the steamers, the Emperor congratulated Mr. Francis on the success of the invention by which the first obstacle that

barred the way to the conquest of a vast territory was removed, opening an avenue to increased Empire.

After the survey of the Aral, only rendered possible by the construction of these vessels, fortifications were constructed on the shores of that sea, and the long-deferred conquest of that section of Asia was, to all intents and purposes, accomplished.

In order to still further emphasize his gratitude, the Emperor caused Mr. Francis to be created a Knight of the Royal Order of Saint Stanislaus, one of the richest decorations in the gift of royalty. Following is a copy of the parchment :

“ We, by the grace of God, Alexander the Second, Emperor and Autocrat of all the Russians, Czar of Poland, Grand Duke of Finland, etc., etc., etc.

“ *To Joseph Francis, Citizen of the United States of North America :*

“ The Ministry of Marine having testified to your particular services, we have graciously been pleased to nominate you a Knight of our Imperial and Royal Order of Saint Stanislaus by an Ukaz of 7th November, 1860, given to our Chapter of Orders, to the end that they do sign and seal this Diploma in witness thereof, and forward to you the insignia of the Order.

“ ST. PETERSBURG, this 10th day of November, 1860.

	<i>The Vice-President,</i>	COUNT BORCH.
[SEAL.]	<i>Lieut.-General,</i>	L'ECESUJSECETZ.
	<i>Grand Master of Ceremonies,</i>	RHITROVO.
	<i>Member,</i>	KU, UYEY5EYUIVEL.

No. 5,756.

Shortly after the securing of his patents in Russia Mr. Francis disposed of a portion of his corrugated system patent to Baron Rumin, Chamberlain to the Emperor, covering Moscow and the Rivers Volga and Don.

After the contract was drawn, a request was made on the part of the Baron to include the Caspian Sea, and to which no objection was made, as little value was placed on the Caspian at that time, on account of its shallow water and isolated position, no one supposing that a

RAILWAY WOULD EVER CROSS THE JAXARTES

and join both the great rivers that flow into the Aral Sea, connecting commerce with the Aral and Caspian, as well as China, and so onward to the Pacific Coast.

A factory was eventually established by Baron Rumin, on the Banks of the Volga, for the construction of steamers, and practical workmen were sent to this factory from the establishment of Mr. Francis, at Greenpoint, Brooklyn, New York.

This brief account of Russia's struggle for supremacy among the family of nations, so intimately interwoven with the history of one of America's foremost inventors in the life-saving field, is another instance of the Providence that rules the destinies of the world, through the lives of unassuming and patient workers.

From experiment came invention. The Life-Car, in this instance the outcome of extended experiment on the part of Joseph Francis, proved the value of the corrugating system, the fame of which, within a few years, spread all over the world. The Life-Car, the first construction under the corrugated system, was merely the germ of the widespread uses to which the system was and is applicable, as has been shown. Steamships, floating docks, pontoon bridges, military wagons and railway cars are only a few among the many constructions to which the Francis system of corrugated iron was applied by him and those to whom he sold the right to manufacture. The Life-Car, then, was the suggestion that led to the construction of the portable, strong, light-draft ship, which proved the most powerful implement, in Russia's hands, of working out the vastest scheme of empire ever conceived in the brain of man. Mr. Francis, successful in all his inventions, has been honored beyond most men by foreign potentates, and now is about to receive what he holds to be the crowning honor, the bestowal of the gold medal awarded him by two Congresses, with the double thanks of this chosen body of representatives of the people.

Appendix.

WILL OF PETER THE GREAT, FATHER OF RUSSIAN SHIP-BUILDING.

The following is an authentic copy of the Will of Peter the Great, the first Emperor of Russia. This will is the supreme foundation and law of Russian politics, since his time, and was confidentially deposited in the hands of the Abbe de Bervis, Minister of Foreign Affairs, in 1757, and also in those of Louis XV. A copy is also to be found in the diplomatic archives of France, from which this translation is derived :

THE WILL.

PRELIMINARY CONSIDERATIONS.

In the name of the most Holy and Indivisible Trinity, we, Peter, the First Emperor and Autocrat of all the Russias, etc., to all our descendants and successors to the throne and government of the Russian nation :

God, from whom we derive our existence, and to whom we owe our crown, having constantly enlightened us by His spirit, and sustained us by His Divine help, allow us to look on the Russian people as called upon hereafter to hold sway over Europe. My reason for thus thinking is, that the European nations have mostly reached a state of old age, bordering upon imbecility, or they are rapidly approaching it : naturally, then, they will be easily and indubitably conquered by a people strong in youth and vigor, especially when this latter shall have attained its full strength and power. I look on the future invasion of the Eastern and Western countries by the North as a periodical movement ordained by Providence, who, in a like manner, regenerated the Russian nation by barbarian invasion. These emigrations of men from the North are as the reflux of the Nile, which, at certain periods comes to fertilize the impoverished lands of Egypt by its deposit. I found Russia as a rivulet, I leave it a river : my successors will make of it a large sea, destined to fertilize the impoverished lands of Europe, and its waters will overflow, in spite of imposing dams erected by weak hands, if our descendants only know how to direct its course. This is the reason I leave them the following instructions. I give those countries to their watchfulness and care, as Moses gave the Tables of the Law to the Jewish people.

I.

Keep the Russian nation in a STATE OF CONTINUAL WAR: so as to have the soldier always under arms, and ready for action, excepting when the finances of the State will not allow it. Keep up the forces; choose the best moments for attack. By these means you will be ready for war even in time of peace. This is for the interest of the future aggrandizement of Russia.

II.

Endeavor by every possible means to bring in from the neighboring civilized countries of Europe officers in times of war, and learned men in times of peace; thus giving the Russian people the advantages enjoyed by other countries, without allowing them to lose any of their own self-respect.

III.

On every occasion take a part in the affairs and quarrels of Europe; above all, in those of Germany, which country, being the nearest, more immediately concerns us.

IV.

Divide Poland, exciting civil discord there; win over the nobility by bribery, corrupt the diets, so as to have influence on the election of Kings, get partisans into office, protect them, bring to sojourn there Muscovite troops, until such time as they can be permanently established there. If the neighboring powers start difficulties, appease them for a time by parceling out the country, until you can retake in detail all that has been ceded.

V.

Take as much as you can from Sweden, and cause yourself to be attacked by her, so as to have a pretext for subduing her. To accomplish this, sever Denmark from Sweden, and Sweden from Denmark, carefully keeping up their rivalries.

VI.

Always choose, as wives for the Russian princes, German princesses, so as to increase family alliances, to draw mutual interests closer, and, by propagating our principles in Germany, to enlist her in our cause.

VII.

England—requiring us for her navy, and she being the only power that can aid in the development of ours, seek a commercial alliance with her, in preference to any other. Exchange our wood, and the productions of our land for her gold, and establish between her merchants, her sailors and ours a continual intercourse; this will aid in perfecting the Russian fleet for navigation and commerce.

VIII.

Extend your possessions toward the North, along the Baltic, and toward the South by the Black Sea.

IX.

Approach as near as possible to Constantinople and its outskirts. He who shall reign there will be the true sovereign of the world. Consequently, be continually at war—sometimes with the Turks, sometimes with Persia. Establish dock yards on the Black Sea, get entire possession of it by degrees, also of the Baltic Sea; this being necessary to the accomplishment of the plan. Hasten the decline of Persia; penetrate to the Persian Gulf; re-establish, if possible, the ancient commerce of the Levant through Syria, and make your way to the Indies—they are the emporium of the world. Once there, you can do without the gold of England.

X.

Seek, and carefully keep up an alliance with Austria; acquiesce, apparently, in her ideas of dominating over Germany, at the same time clandestinely exciting against her the jealousy of the neighboring provinces. Endeavor that the aid of Russia should be called for, by one and the other, so that by exercising a kind of guardianship over the country, you prepare a way for governing hereafter.

XI.

Give the House of Austria an interest, for joining in banishing the Turks from Europe; defraud her of her share of the booty, at the conquest of Constantinople, either by raising a war for her with the ancient states of Europe, or by giving her a portion, which you will take back at a future period.

XII.

Attach to yourselves, and assemble around you, all the united Greeks, as also the disunited or schismatics, who are scattered either in Hungary, Turkey, or the south of Poland. Make yourselves their centres, their chief support, and lay the foundation for universal supremacy, by establishing a kind of royalty or sacerdotal government; the Slavonic Greeks will be so many friends that you will have scattered amongst your enemies.

XIII.

Sweden severed, Persia and Turkey conquered, Poland subjugated, our armies united, the Black and Baltic Seas guarded by our vessels, you must make propositions separately and discreetly—first to the Court of Versailles, then to that of Vienna, to share with them the Empire of the Universe.

If one of them accept—and it cannot be otherwise, so as you flatter their pride and ambition—make use of it to crush the other—then crush, in its turn, the surviving one, by engaging with it in a death-struggle; the issue of which cannot be doubtful, Russia possessing already all the East and a great part of Europe.

XIV.

If—which is not likely—both refuse the propositions of Russia, you must manage to raise quarrels for them, and make them exhaust one another; then profiting by a decisive moment, Russia will bring down her assembled troops on Germany; at the same time, two considerable fleets will set out—the one from the Sea of Azov, the other from the port of Archangel—loaded with Asiatic hordes, under the convoy of the armed fleets from the Black Sea and the Baltic; advancing by the Mediterranean and the Atlantic Ocean, they will invade France on one side, whilst Germany will already have been invaded on the other. These countries conquered, the rest of Europe will easily pass under the yoke, without striking a single blow.

XV.

Thus Europe can, and ought, to be subdued.

PETER I.,

AUTOCRAT OF ALL THE RUSSIAS.

Lest the reader of this WILL may form an opinion antagonistic to its author, it may be well to state that while Peter the Great was a Despot he was also a Patriot—and while a Tyrant he was yet a Humanitarian. This man, who could icily command death by the knout was the same man who yielded up his own life in rescuing a sailor who had fallen overboard in the ice-laden waters of the Neva. And Peter was, above and beyond all, a Statesman, an Inventor, a finished Mechanic and Progenerator of the Russian Life-Saving Service.

