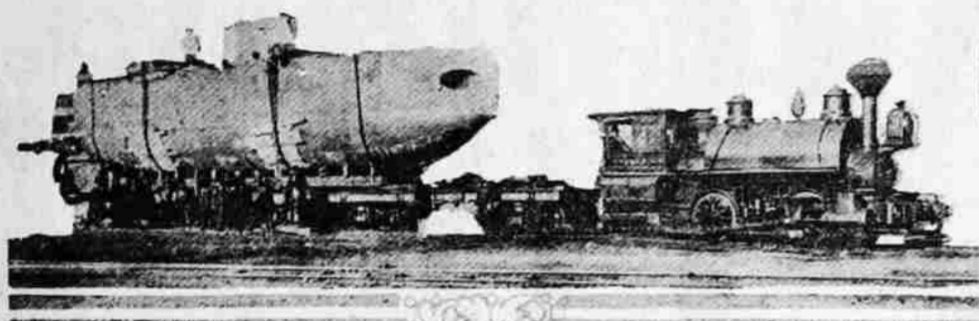


Magazine Feature Section

SIMON LAKE INVENTOR of the SUBMARINE to MAKE U.S. INVINCIBLE

Greatest Builder of Under-Water Craft Tells How America Can Be Made Unconquerable and Defeat Its Enemies at Will



SHIPPING A SUBMARINE AS FREIGHT ON THE TRANS-SIBERIAN R.R.

If the United States becomes involved in war, what would be its chief means of defense?

Poison gases more deadly than those employed by Germany in fighting the allies in the trenches, says one inventor.

Something more deadly than poison gases—a force not now known to the world, says Thomas Edison. Deadly bacilli, such as typhoid or bubonic plague that might be released in the camps of the enemy, say several medical experts.

The submarine, says Simon Lake, inventor of the even keel under sea craft.

And to military and naval experts the latter suggestion appears the best of all in consideration of the fact that the United States would be on the defensive.

It is clear that the United States besides seizing the vessels of the nation on which war was declared, and perhaps taking some of its island possessions, would remain passive and it would be up to the other power to become the aggressor. In such an event the troops of the enemy would have to come to the United States aboard transports or warships and the submarine would be used to meet such ships and destroy them with their crews.

SIMON LAKE'S INVENTION.

"The United States can make herself so strong that it will be practically beyond attack by providing itself with a sufficient number of submarines of a defensive type," says Simon Lake, the father of the submarine in the United States, and the inventor of the type of submarines now being used by Germany in its naval war zone.

"The importance of submarines has been proved in the present European struggle," he explains in talking of the defense of the United States.

"It has proved the worthlessness of building great battleships, costing many millions, which are only compelled to intern themselves in time of war for fear of destruction by the submarines.

"It is my firm belief that when all the great nations of the world prepare themselves with large fleets of submarines, war will end, for submarines can hardly fight against each other and battleships dare not attack them. A submarine preparedness would end warfare for all time.

"I have been much impressed by what Thomas Edison and Henry Ford have said about the responsibility of the inventor and manufacturer of war materials, and certainly no man could feel proud of making a device that would cost the lives of others. When I first decided to make practical the submarine, which had been the dream of centuries, I did not consider it as an offensive craft but as a commercial instrument which would open to mankind the mysteries and treasures of ocean depths. I must admit that its subsequent and extensive adoption as a warlike instrument has appalled and distressed me, but now I feel reassured for it is entirely plain to me that it will be event-

ually and ere long the greatest instrument toward peace.

PROMOTING PEACE.

"My theory that this will be the case is built on better premises than the theories of the men who argue that every new explosive, every long-range gun, helps make war unlikely by making it more horrible. Horrors do not deter men from beligerency. But the submarine will do more than make war horrible. It will make successful operations by other naval vessels impossible.

"I believe my justification of myself to be logical and worthy. Less people will be killed in future because the ability of the submarine has saved a hundred times as many lives as it has taken. Imagine the loss of life sure to accompany one great naval battle in which the vast ships owned by Germany, England and France really should fight as they were built to fight. "Imagine also the devastation and loss of life that would have occurred in the coast cities of the belligerents had not the fear of submarines kept the enemy with their long-range guns away. For generations all these nations have been preparing for such battles, yet there have been no such battles for the existence of the submarines prevent them. There probably will be no really great naval battle in this war.

"If the great ships of England, France and Russia should meet the great ships of Germany on the sea as they were planned to meet, the resultant slaughter, armed as they are, will be such as to stagger the imagination. Vast sums, the lives of many brilliant men, have been devoted to planning for that slaughter. I do not hesitate to say that such a meeting will not take place. And the reason it never will come is that the little submarine makes it impossible.

"The power of the submarine is terrible, no doubt, as that of an engine of destruction, but the psychological effect of the submarine toward safety is greater than its actual destructive influence. It is inevitable that the submarine should arouse fear, should puzzle, even more than aerial craft.

"The German submarines are in no way superior to ours as we might demonstrate in case this country were in danger. They have had water trouble in their boats, but they have kept it secret. Most of the submarine disasters since the vessel was invented have been due to engine troubles.

SPEED IS ESSENTIAL.

"I believe in speed in submarines, but not in sacrificing other things to obtain speed. A vessel on low speed can be operated on storage batteries while one at high speed would have to depend on combustion, and this means a great use of the oxygen of the air in the interior of the vessel.

"However, the air can be supplied by a tube of transparent material, about six inches wide and extending to the surface of the sea. Of course there is the same drawback about this as there is about the periscope.

While it may not be seen when the submarine is halted, it leaves a white wake when she is in motion. Two lines of future development in the submarine are—the making of greater speed and the discovery of some sort of conning tower and air tube that not only will be invisible when the vessel is halted, but will not show when she is going at full speed.

"Personally, I do not believe that there is any answer to the submarine, although it is only within two years that any nation admitted the paramount importance of such vessels.

"Any harbor, any coast line of the United States could be protected by submarines. If there were enough of them to form a cordon around the city or harbor they were to protect they would be invincible. Three lines of such vessels, each carrying eight Whitehead torpedoes, each torpedo capable of sinking a battleship, would make New York harbor unapproachable to the ships of an enemy.

"Every approaching ship would be subject to attack from at least three submarines. It is impossible that the inner two lines of vessels ever would be called upon to fire a shot, for it is not likely that any ship could pass the outer single line of submarine defense," he continued.

The inventor suggests that in time of war the small submarines, costing about \$25,000 each (dreadnaught cost \$15,000,000) be transported from one harbor to another by rail.

Simon Lake during the Russo-Japanese war transported submarines across Siberia on the railroads there. He suggests that American railroads build lines into the harbors so that the little undersea vessels may readily be floated onto flat cars. The cars then can take the vessels to the places they are needed.

Explaining his plan of transportation, Simon Lake said:

TRANSPORTATION SYSTEM.

"We could build small submarines of this character in large numbers, and could arrange with the railroads to send a track into the water at each of their seaboard termini.

"The vessels would be of a smaller type than any now under construction and they could be built for about \$25,000 apiece.

"They would be perfect instruments for harbor defense and could be rushed from harbor to harbor, as needed, at as high speed as railways can make on land, although in the water they would not have a speed higher than 9 to 10 knots.

"But that would be sufficient. Their land mobility is what would make them valuable.

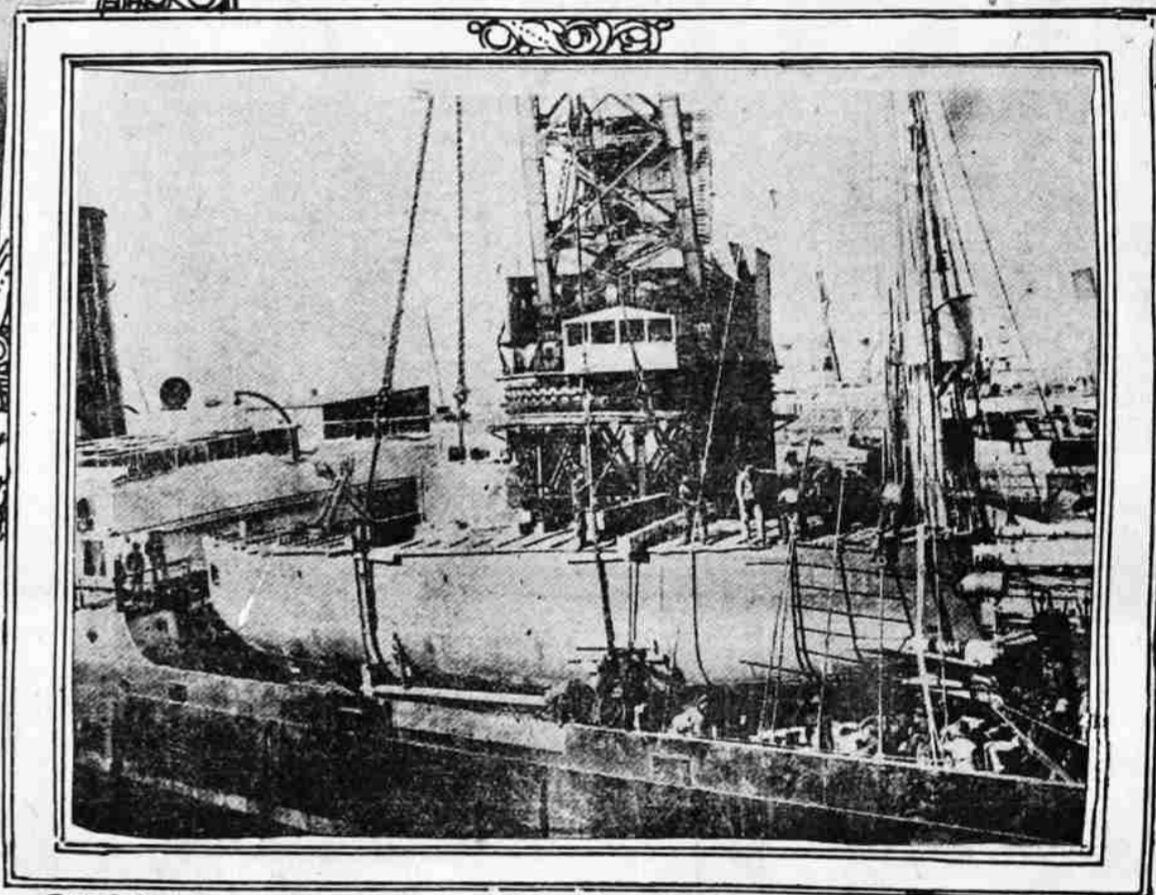
"The moment a hostile fleet ap-



SIMON LAKE



A SUBMARINE AS SHE APPEARED SOON AFTER SHE HAD RISEN THROUGH HEAVY ICE AND SNOW.



SHIPPING A SUBMARINE—A DECKLOAD ON ANOTHER VESSEL

has been in frequent conference with Thomas Edison.

May not the increased activity on Ford's part have some remote connection with the United States' plan of defense?

Keeping It Circulating.

"This," hoarsely spoke the hero, shaking a roll of bills in the face of the villain, "this is blood money!" "Blood money?" echoes the villain, pausing to light a cigaret.

"Yes. Take it back. I will not have it about me!"

"Very well," replies the villain, puffing disdainfully. "I shall blow it in myself. Blood money? Ha, ha-a-a! It shall not be spent in vain."

At this point a lady in the third row of the orchestra fainted.

His Line of Work.

"Sir," said the subscriber to the editor of the Bowersville Clarion, "you published a highly colored report of the size and sweetness of the watermelon in my patch. That ought to be corrected. Who wrote it, anyhow?"

"That highly colored report," explained the editor, "was turned in by our highly colored reporter, George Washington Johnson, who also turns the crank of the press on Friday afternoons. He claimed that he based the report on observation as well as on inside information."

Their Own Petard.

"Did you read that first article in the Gettether Magazine about 'How to Amass a Fortune'? The one that said to cut off all unnecessary expenses and save every dime?" "Yes, I read that one."

"Do you remember, then, in the second article of the series, how it said that—"

"Didn't read the second article. Took the magazine at its word and began saving money by ceasing to purchase it."

A Sad Awakening.

A Kentuckian with a huge whisky jug asked a countryman to take him in a wagon a few miles over a hill, adding, "How much will it be worth?"

"Oh, a couple of drinks out of that jug will be about right," said the countryman.

After the journey had been made and the driver had taken a "swig," he said:

"Stranger, I am a peaceable man, but unless you want to be full of lead tonight you had better find out a new way to carry your molasses."

A Trip For Sightseers

Hundreds of Americans, innocent sightseers, who have gone to Tia Juana, just across the international line from San Diego, Cal., call it, with reason, "the hell-hole of the continent."

They have gone back to the Panama-California exposition city wiser and sadder individuals.

Some bear the blackjack's brand upon their heads. Many have known the sickening blackness of knock-out drops. They have been robbed of whatever gold and valuables they carried, either at the point of a gun in some foul rendezvous of crooks or by the manipulations or sure thing gamblers, aided by women harpies.

Anything goes in Tia Juana, the wicked! It is the city of loot.

Professional gamblers, thugs, confidence men, and bunco steers from all parts of the United States have made it their stamping ground for the purpose of fleecing San Diego fair visitors during 1915.

Almost without exception these outlaws are American renegades—no Mexicans. They openly flaunt their crimes in the face of the United States officers, standing impotently at the invisible border, powerless to help the victims as they are powerless to punish the outlaws.

Roulette, faro, poker, slot machines, the shell game, fake bull ring fights, and the wives of painted women—these are some of the means of allied underworld forces of Tia Juana employ in fleecing unsuspecting American men and women who go there, across the line, "to see Mexico."

Recently a prominent Los Angeles physician reported that he had been stripped of all his money and valuables by the "bull ring" ruse, engineered by a quartet of crooks. Two men, posing as fellow tourists, lured him to the old arena, where two confederates held up the three at the point of revolvers. The highway-men then split the loot four ways.

Tia Juana's American renegades maintain shrewd cappers at some of the San Diego hotels, who contrive to meet "live ones" in quest of "a little spice," and steer them down there to the tender mercies of the law. Other bunco steers work on the "rubber-neck" wagons plying from San Diego, posing as tourists before the intended victims.

Some of the smoothest of these cappers are women—of the type calculated to strike up acquaintanceship with men who want to go back home and brag about having

had a romance with a charming senorita.

The "senoritas," with carmine lips and eyes ducked to taste, are not Mexicans or girls of Castile. They are well known, many of them, to the police of Chicago, New York, New Orleans, or San Francisco. And the "romance" they strike up with the innocent abroad would hardly bear telling about back home, even if the victims were so inclined after having been robbed and perhaps beaten up in some vile hole where they were lured by pretty bait and petticoats.

Some of these women work the own sex among the tourists, coaxing them into the gambling joints of the Mexican Monte Carlo, with a "tip" that there is easy money to be made at roulette—and how exciting it tell your friends of your adventure in Mexico!

It is the hanker of men and women away from their accustomed environment for spicy adventure, as well as the appeal to the gambling lust, that the harpies of Tia Juana have converted to their own surprising profit.

And it is just this greed for easy money "by luck" on the part of prospective victims which makes Tia Juana continue to flourish as "the wickedest place on the continent," as it is the gullibility of seekers after clandestine romance which accounts for the "senoritas" part in the fleecing.

A Gamble.

An Irishman wishing to take a "homestead," and not knowing how to go about it, sought information from a friend.

"Mike," he said, "you've taken a homestead, an' I thought maybe you could tell me the law concernin' how to go about it?"

"Well, Dennis, I don't remember the exact wordin' of the law, but I can give the main' uv it. The main' uv it is this: The government is willin' to bet ye 160 acres of land agin \$14 that ye can't live on it five years without starvin' to death."

A Shut-In.

"You have named the baby Telenus?" exclaimed the horrified caller. "Yes," answered Mrs. Lapsling. "I think that's what we'll call her. It's the name my husband suggested."

"But think how it will sound when she grows to be a young woman! Do you know what 'Telenus' means?" It means lockjaw.