

Has Submarine Met Its Master?

Big Claims for United States Invention

Mr. Sperry's Achievement

Has Demonstrated His Ability in Perfecting Other Useful Devices for War Purposes

An announcement a few days ago by the chairman of the United States Naval Advisory Board to the effect that a submarine-destroyer has been invented attracted world-wide interest. Later on the fact leaked out that the inventor was Elmer Ambrose Sperry, of Brooklyn. Necessarily no details of the invention can be given by those familiar with them, and if the device has all the success that is claimed for it many months are likely to elapse before the general public will be made aware of the character of the invention. The element of surprise may be as important in the submarine-destroyer as it was in the British tanks, which were buried against

absolutely unprepared and unsuspecting Germans. Unfortunately in the past one recalls too many American inventions that were destined to revolutionize this industry, and that science, and too few of them that were of more than trifling importance. A policy of watchful and hopeful waiting is becoming with regard to the Sperry invention.

A Real Inventor.

Nevertheless, there is no man in the United States to whom we might look with greater confidence than to Mr. Sperry to solve the problem, not even to Mr. Edison. He has some remarkable achievements to his credit, and his previous inventions, some of which have been adopted in all parts of the world, have had a military tendency. There has been a distinct warlike cant to Mr. Sperry's scientific investigations. It is said that he has been devoting himself exclusively for many months to solving the submarine problem. If he has succeeded, his name will be one of the most famous in the annals of the war. If the submarine is beaten, Germany is beaten without regard to Russia. One can imagine nothing which would more swiftly bring an end to the war than some scheme by which U-boats would be rendered useless. It would be worth a million trained men in the field. No doubt some time in the future a destroyer of the U-boat destroyer will be evolved, but this war will have passed into history long before science has taken this stride.

Making the Aeroplane "Foot-Proof." The most famous of the numerous Sperry inventions is the aeroplane stabilizer. Early in 1914 the French Aero Club, inspired by the military authorities,

This is the Buckle



ties, offered a prize of 50,000 francs for an invention that would make the aeroplane "foot-proof." What was wanted was a device that would enable the aeroplane to balance itself in the event of the pilot being obliged to take his hands from the steering-wheel, some such invention as the cat has for falling on her feet. Before this Sperry had patented such a device, but had been unable to convince his fellow-countrymen of its importance. So he sent a machine equipped with his stabilizer over to France, and his son, Lawrence, gave the demonstration. There were numerous entries in the competition, but it is a literal truth to say that the Sperry machine outclassed all others. Young Sperry was able to perform feats in the air previously undreamed of. As a concluding stunt his passenger walked out on the wing of the machine without in the slightest degree affecting its horizontal position. The machine could not be unbalanced.

The Gyroscopic Principle. The Sperry device consists of a gyroscope, or rather four gyroscopes, the invention which had been previously employed on the mono-rail railway. The gyroscope is founded on the principle of the spinning top. If the top spins hard enough it will be found impossible to keep it from remaining upright as long as it continues to spin. In the aeroplane there are four gyroscopes, each three inches in diameter. The apparatus occupies a space of only 18 by 12 inches. One pair works the elevating planes; the other pair controls lateral stability so that in ordinary conditions the driver doesn't have to drive at all; the plane doesn't itself. If the engine stops in flight the plane volplanes automatically, and it rights itself in a gust of wind before the aviator can be aware that he has deviated from the normal. Another Sperry invention for aeroplanes is a radio set, so much lighter than others that it has been almost universally adopted.

Many Inventions.

His earliest important invention was the gyro-compass designed to eliminate the uncertainties that are inseparable from the magnetic needle in these days of steel ships. He has also invented the gyroscopic principle was applied. If the axis of the gyroscope is pointed to the north it will continue to point to the north as long as the spinning is maintained. Most of the big ships have adopted this compass. Mr. Sperry has also invented the highest electric beacon in the world; invented the first electric chain mining machine; devised a deterring press and machinery for making fuse wires; designed an electric carriage, the latest aerial torpedo, and at present holds more than 250 patents issued in the United States and in Europe. In all his later inventions and experiments he has been greatly assisted by his son, Lawrence, who is still a mere boy, and no doubt Lawrence has contributed to the submarine destroyer, and if it is a device requiring a man of nerve to operate, probably Lawrence will have the honor of destroying a German submarine in the near future.

THOUSANDS FLOCK TO ROOSEVELT STANDARD

Oyster Bay Colonel Far Outdoes Government in Number of Recruits Gained

Without drumbeat, trumpet flourishing or flag-waving, Col. Theodore Roosevelt, through sheer force of patriotism, prestige and personality, has recruited 187,000 men who are eager to follow to France to fight against the Germans. The roster at the headquarters of the "Roosevelt Division" at 735 Fifth avenue, contain the names of rather more than three times as many volunteers as the United States government has been able to get up to date. Since Feb. 2, when the colonel and his staff definitely took up the task of enlisting American citizens who desired not only to get into the field quickly, but to get in under Roosevelt, responses have poured in from every state in the union. The plain figures indicate that the ex-president could have at least 300,000 fighting men if he wanted so many. He doesn't. The big problem of the quiet, almost secretive, enlistment for the

Roosevelt division has been to sift and select from an overwhelming flood of applications just the type and character of volunteers required by the special and peculiar necessities of the plan.

Putting it generally, the colonel has accepted only such men as are above the conscription age and whose means are such that dependents would be well cared for without public assistance in case of the death or permanent disability of the volunteers. His legionaries have settled incomes ranging from \$2,500 a year to \$50,000 a year. They have signed in every state at the call of recruiting officers, who were extremely diligent in selecting only first class men mentally and physically. The work of organization, now complete almost to the last detail, has been enormous.

Can Officer Two Divisions.

Broadly stated, the colonel is now in the position to offer to the war department two completely equipped divisions, including infantry, cavalry, field artillery, engineers, signal corps, motorcycle machine gun commands, motor transport, commissary and subsistence, aviation corps, hospital corps and quartermaster's corps.

He has men enough already pledged to constitute three divisions, but his desire and ambition is to mobilize an army corps of two divisions with himself as junior officer, merely a brigade commander and ranking ninth after the regular army officers who would command corps, divisions and five of the six brigades.

The financial preparation for the colonel's plan is such that these divisions could be mobilized and sent to France without it being necessary, in all probability, to call on Uncle Sam for a dollar of expense. The offers of financial assistance from wealthy volunteers and from wealthy citizens who cannot go themselves, but who are mighty anxious to have the colonel go, have been astonishing in number and size.

It is not possible to divulge the names of contributors, real or potential, but it may be said that in one southern city alone \$1,000,000 has been pledged. In another city seventy-five men have signed their checks for \$1,000 each. There are offers of \$50,000, \$25,000, \$10,000 and \$5,000 and the number of smaller offers is almost beyond count. These offers come from everywhere in the country—north, east, south and west.

The estimate has been made that the magic of the colonel's name can mobilize \$10,000,000 in voluntary offerings. The dollar of expense that the president to take his men to camp for a short training period preliminary to boarding troops for France or England.

Not Final. "Young Charlie Spindlin seems to be pretty well satisfied with himself."

"Oh, well, Charlie was never very select in his tastes."

With leather prices still high, you may have several pairs of attractive Fleet Foot Summer Shoes for what one good pair of leather boots cost.

Fleet Foot line is so complete, that there are many styles for work and play—for sports and outings—for men, women and children.

Ask your dealer to show you the full line of Fleet Foot Shoes—and save money this summer. 205

There is no temptation to change brands if you smoke Marguerites.

THE VAMPIRES.

(From the Montreal Herald.)

Vampires are foul creatures that suck the blood of living men and women while they sleep.

We have them, in more or less human form, in Canada! we have them in Montreal.

They should be the outcasts of Society. But are they?

No; they look past us in limousines, shaking us with their dust; they look almost like real men; they dazzle us with the size of their watch-chains and the sparkle of their diamond pins and rings.

They consort with those in high places and they frequent high-class clubs. But the Vampire's breath is pestilential.

He sucks the life-blood of living men and women—aye, and of innocent little children—but he does it in this way:

He boosts the price of the necessities of life so that they are out of reach. Men and women and little children, improperly nourished, sicken and die.

But the Vampire grows richer. It is one of the darkest blots on our civilization that this is possible.

In Belgium there is starvation because there is no food in the land.

The land of elevators bursting with their stores of wheat.

In Belgium the situation has arisen by force majeure.

In Canada, the present-day conditions have been brought about by the greed of man.

The natural hunger for bread cannot be satisfied until the unnatural, the cruel, the inhuman hunger for gold has been appeased.

The cry of the little children for cheap bread, cheap milk, cheap ice, goes up.

but their voices are not heard. Those who could help are deaf and blind—they are not dumb. They are willing enough to talk.

What is talk when action is necessary? Food profiteering in Canada has got to be put a stop to sooner or later.

Why not put a stop to it now? For some poor, tired, ill-nourished bodies tomorrow may be too late.

"No matter how regular the Features—Beauty is dependent on the Complexion"

So said the Great Napoleon. He could have gone much further and said that a woman cannot be even attractive without a Good Complexion. Why are so many women careless in this respect, when the remedy is so simple? SEELY'S DOUBLE CREAMS not only preserve a good complexion, but they provide a Good Complexion where it is lacking.

Send us a dollar and the name of your druggist and we will send you the pair of Creams—one an Oil Cream for use at night and the other a Vanishing Cream for day use.

Send Us a Postal for FREE Beauty Book. SEELY, Perfumer Windsor, Ont. and Detroit, Mich.

Eliminate Cranking and Broken Arms. Cranking and delays in starting rob you of half the pleasure of motoring—the Disco adds to the enjoyment by enabling you to start when you wish—in any weather, at any time, on any road—and pulls you out when your engine "Stalls" in a tight place.

Disco Electric Starter should be on every motor not only for the extreme convenience in operating the car, but also for its "Safety First" features. The Disco is made in two types—the single unit 12 volt system or two unit 6 volt system—either will furnish real power for starting and enough reserve power for any emergency.

The Disco is easily installed in a few hours, and is the dependable starter for old and new cars. Each outfit is complete, ready to be set up, even to the screws. Let us send you full particulars on Disco Starter.

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Most perfect mechanical starter on the market. Will start your engine on one pull of the handle. You don't have to leave your seat. Does not change the appearance of the car, as the whole device, with the exception of the starting handle, goes under the hood. Easy to install.

PRICE \$12.00. INSTALLED, \$14.00. CENTRAL GARAGE. 60 Waterloo St. Sole Distributors. Tel. 2846.

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with my money than buy Life Insurance, is an excuse advanced by many persons for being uninsured or sometimes underinsured. Such an assertion cannot be argued to a logical conclusion, however, as less than 5% leave a competence for their dependents.

During 1916, we paid 18 Death Claims where the policies had not been in force one year. Had these policyholders advanced this argument, what an unfortunate thing it would have been for their beneficiaries.

Our Guaranteed Investment Policies enable you to systematically save in a manner unsurpassed in any other way. Moreover, should the unexpected happen, your heirs are provided for, as Life Insurance is the first asset realized on in the event of death.

The Manufacturers Life Insurance Company. HEAD OFFICE - TORONTO, CANADA. The E. B. Macbain Co., Limited, Managers for the Maritime Provinces, St. John, N. B.

Mutt and Jeff—Mutt Takes Nautical Terms Too Seriously

I CAN'T SEE TO SHAKE DOWN HERE, I'M GOING UP ON THE FIRST FLOOR OF THE SHIP WHERE THERE'S SOME LIGHT.

I THOUGHT YOU WERE COMING TO YOUR QUARTERS FOR YOUR DRESS COAT. ASSURANCE? YOUR SUITCASES AREN'T THERE!

WHAT DO YOU MEAN, "DECK"?

AREN'T YOU EVER GOING TO LEARN NAUTICAL TERMS? YOU'RE SUPPOSED TO STAY ON THE INSIDE OF THE SHIP FOR TEN DAYS. DO YOU UNDERSTAND THAT?

I KNOW!

WELL, THEN WHY DO I FIND YOU SHAVING ON THE OUTSIDE?

BECAUSE THAT'S WHERE MY WHISKERS GROW. DID YOU THINK MY FACE WAS SUN-BLIND?