Vaunted Schley Class Boats a Disappointment---Even a stop around by way of the Atlantic With Greatest Strides Nation Will Still Be Five Years Behind Europe in Speed and Efficiency

has been provoked by the recent proposition of the Secretary of the Navy. According to Mr. Daniels, Congress has asked for the impossible, and American builders are not offset this limited underwater mobile, and American builders are not offset this limited underwater mobility by better surface, The biggest boats can a twenty knot boat could be assured. It should be borne in mind that at this period the American navy was putting up with submarines of consistent with the submarine must be the submarine state. etructed in Europe.

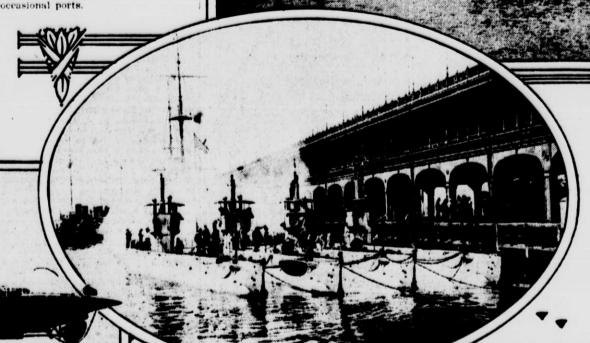
equal to the task of turning out sub-marines such as have been con-order to get from her base and to tary of the Navy to hesitate to apructed in Europe.

A year ago the Navy Department sible—generally under the cover of eign builders obtained no substantial contracted for the building of the sea- darkness. Technically, it is an easier recognition. Rumors of what they

Sy ROBERT G. SKERRETT.

Sometimes of the United States navy to take a backward step in the building of its submarines? The question obtain a wide radius of action below of its submarines? The question obtain a wide radius of action below and refining the model of the vessel

trailin submarines A E-1 and A E-2-sister boats of the British E classvoyage from Barrow to Sydney under their own power and without convoy. This was accomplished by layovers at



Models showing relative size of 185 ton and 1,000 ton submarines. The larger boat is of Italian make, built for the German Government. Speed, 19 knots.

seing or fleet submarine Schley, and matter to increase surface speed and promised got abroad here, and in this

nearly three years.

ing to promise only nineteen knots as in growing the procession. They laid the facts acertainty for a sustained run of four burs, but they believe they might tours, but they believe they migh

y was announced that the United to widen at the same time the radius way Congress was inspired to make an States was to lead the world with of action than it is to augment the appropriation for the first twenty knot hat boat, which was to be finished velocity under water. These consid- seagoing submarine, the Schley.

and pictured the jump we were to and more. Certain of the European sons have undoubtedly been put to and pictured the jump we were to rake in outstripping the other maritime nations.

Congress, with confidence in American engineering capacity, followed the appropriation for the Schley with a provision for two more fleet submarines, to have, if possible, a surface speed of twenty-five knots. Bids for these vessels were asked and they were recently opened. Then it appeared that none of the builders was silling to promise twenty-five knots, and the best that was offered was twenty knots and a building peried of navel practical accomplishments. Or navel three years.

and more. Certain of the European ravies have to-day submarines capacity for doing eighteen, nineteen and twenty is an hour, and it is assorted that the most efficient of these underwater vessels can make in the underwater vessels can make in the neighborhood of twenty-one knots. These are not experimental craft, as the Schley is declared to be, but boats in commission and with the battle fleets. Why, it is asked, should the United States lag in this field of navel architecture, which owes so much to the practical accomplishments of the best that was offered was twenty knots and a building peried of many had at the beginning of the war comparatively few submarines; in fact fewer than America possessed. This is certainly significant in the light of the work achieved by the U boats. It is known of course that the Imperial Admiraty has speeded up the German shipyards in this type of constitution since them, and the service numbers of the boats are a pretty good index of what has been accomplished.

For instance, much was heard early tained information from abroad that in the fleth. United States have undoubtedly been put to good account already.

It has been said by Admiral Griffin of the Vewer than America possessed. This is certainly significant in the light of the work achieved by the U boats. It is known of course that the Imperial Admiraty has speeded up the German shipyards in this type of constitution since them, and the service numbers of the boa

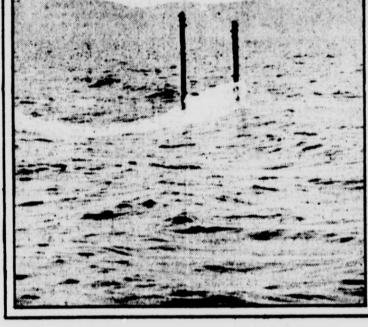
early three years.

Now comes the startling announcemade it clear that American submalong before the U-36 was operating off ment that the builders are really willrine builders were not at the head of the Dutch coast and in the North Sca.
ing to promise only nineteen knots as the procession. They laid the facts This submarine was the biggest seen

less speedy boats. In the light of eighteen knots surface speed, and in took his craft from Wilhelmshaven to durance were superior to the Ausbroke out, and undoubtedly had a surface speed of 18 knots. The succeed-

in 1918. Substantially three years erations influenced Congress to appro- uring upon a basis of speed, and using were to be devoted to the construction priate for the Schley, and foreign Ad- the Schley as a comparison, it is eviof this 1,200 ton craft and a speed miralties have planned similar boats dent that the United States will be at of twenty knots an hour on the sur- for the same reasons. of this 1,200 ton craft and a speed infraities have planned similar boats dent that the United States will be at of twenty knots an hour on the surface was guaranteed. Lest the American public should fail to appreciate United States and other nations is that the Schley is ready for service. This what the Schley was to represent Mr. they have actually done what the because the belligerent nations are Daniels described the difficulties over- American navy is doubtful of doing learning through experience many val-come in the designing of the vessel in the course of the next two years uable lessons, and some of these les-

Three years ago naval officials ob- For instance, much was heard early



the submarines and to account the U-51 had to make first the U-52 had to make first the U-52 had to make first the U-53 had to be approximately 20 we have discarded the two cycle ended to construct submarines of the first the U-53 had to be approximately 20 we have discarded the two cycle ended the two cycle ended to construct submarines of the first the U-53 had to be approximately 20 we have discarded the two cycle ended with the U-54 had to be approximately 20 we have discarded the two cycle ended with the U-54 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 20 we have discarded the two cycle ended with the U-55 had to be approximately 2

The Swedish submarine Hvalen, 15.2 knots, built in 1909. This boat ran without escort 3,000 miles from Spezia, where built, to Stockholm.

While the experts are puzzling their heads over the nation's submarine policy an entirely new boat, a semi-submersible, may appear as the great surprise of the present war and change the whole theory of naval warfare. As much was hinted last week by Capt. W. S. Sims before the House Naval Affairs Committee when he proposed the construction of such a vessel, a semi-submersible of high speed. equipped with sixteen torpedo tubes. Such a craft, he said, would be a terror to battleships. Capt. Sims suggested that the Germans already were at work on the same idea and that one might any day dart out of Kiel Canal to work havoc with the British fleet.

engine trouble and with average shortsightedness.

boats six years ago.

courage competition. French and Italian designs were welcomed, and a number of boats of foreign conception were taken in hand in English ship- varies.

Ged to the two cycle and there are surface in a moderate sea.

Rear Admirat Griffin recently stated the situation in this country during a we have fleet or scagoing submarfnes? The answer is, because haval strat-

At the beginning of the war the said: British navy had building a numerous "The trouble with the submarine. group of submarines, ranging from 1,000 to 1.500 tons submerged displacement, with underwater speed of from 10½ to 12 knots and surface speed of 20 knots. France, likewise, has boats of 20 and 21 knots, displacing submerged more than 1,000 tons. Italy

shat has been done and is under way in Europe it may be asked if such a curse would not be a mistake.

One thing that has shown up continuously during the present continuously during the pre

minds have been devoted to the varied have now cannot operate for any problems involved; and as a result length of time or at any great disthe transatlantic makers have forged tance, because it will tire out the steadily ahead of us. Americans have crews. They might go out before daybeen profoundly insular in their atti- light and come back before night and tude toward the development of this perhaps for two days, but when it special order of combustion motor, and comes to staying out a week or two A group of our K boats, the the situation that confronts us to-day weeks, or more, they want larger

Three years ago Italian builders had I would build a larger one for the dinspeed of only 12½ knots. Germany had efficient 12 knot
the Diesel type capable of developing 1,300 brake horse-power and were
after one or two days out. You want then building two of these motors for it to be possible to stay a week or doing, that can only be left to conjecture; but American naval authoriment. Since then the p\_ r of these
ties have recently announced that inengines has been increased and notato have larger boats, whether they

ties have recently announced that information has come to them from various European sources showing that a number of the belligerents have been making notable improvements in their submarines. Indeed, these experts admit that the United States navy might be better off if it could profit by them, but unfortunately the details have been disclosed in confidence and we cannot avail ourselves of them until after hostilities cease. This state of affairs makes one fact clear—we are not up to date.

For a long time the British Government built submarines of a single design, but a short while before the war the Admiralty was wise enough to encourage competition. French and Italian designs were welcomed, and a single decayed on the four cycle and there are good reasons for this.

Bear Admiral ontails have been increased and notable engines has been increased and notable increased and notable engines have been difficulties have been with the four cycle heavy oil motor and tried to better it by the adoption of the two cycle motor. Because of many failures the Navy Department now in size upon returning to the four cycle officers are in complete accord upon like point. The public does not know if but during maneguares last year, in which the submarines took part, the men aboard some of the boats were unterly prostrated by seasickness and other physical stresses induced by the well night ceaseless motion of these small vessels when running on the sourface in a moderate sea.

And why, the layman will ask, must

ably they have kept pace with the art ments with two cycle engines on those don

biggest in commission, liable to is the logical consequence of that vessels, of I were going to build new boats

of the House of Representatives, He exists insist upon faster battleships, and also declare that every dread-

ten of its people and the adaptation and development of its actual and potential resources. The qualities in a people that make

for efficiency, for accomplishing maximum results with a given amount of resources, are essentially the same in both peace and war. In war the rank and file use most their purely physical and nervous energy; these age drained to the point of exhaustion and the victory is to the side which can the best stand the strain. In peace the rank and file use most their mental and nervous energy. Now for the development of mental

and nervous vigor and efficiency, as. of course, for purely physical power and efficiency, physical education is absolutely necessary. That nation which bases its system of education upon physical education as a foundation will be, I may say is, the unquestionable leader of the world in efficiency.

Our forefathers were pioneers, main of hardihood, courage and indomitable will, used to a wholesome mingling of mental, moral and physical hardships and trials. Since then the paths haive Frown easier and weaker stock has followed in the trails blazed by the etrong. Instead of a few stalwart exemples of hardy races we have many peoples differing widely in kind, abfiity and ideals.

Love of country, manly vigor and the spirit of cooperation are not too plantiful. High sounding speeches and caustic criticism, really for political ends but passed off for statesmanthip, do not foster real patriotism. but rather the false shouting jingo variety that does not prepare us for but rushes us into war, ready or not. With such patriotism real preparedhad not been popular, else we

had been prepared years ago.
No people living under the trying na of our complex modern life

By DR. DUDLEY A. SARGENT.

THE United States is at war to any war. Inalydinate, corporations, war, In any considerable proportion, submitted and the based and any separate property and any war. Inalydinate, corporations, war, Inalydinate, corporations, and always has been at the fine-rational economic struggles are as a major with the fine-rational economic struggles are as a major with the fine-rational economic struggles are as a major with the fine-rational economic struggles are as a major with the fine-rational economic struggles are as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are as as a major with the fine-rational economic struggles are a

cither make or break the recruit. If he can stand the strain he is kept as long as possible in the training camp, then sent to the front. If he cannot stand the strain he is dropped and helps swell the ranks of England's insefficient population. Thousands of men lie in the hospitals without a scratch. They are victims of nervous exhaustion under the terrible tension of the modern battle front.

People learn most easily when they and develop best in childhood and the stimulus of war. If we count upon their summer work as described in the subscitute for the stimulus of war. If sort of sport? Can we count upon their summer work as disciplined into the homes of men who have attended military training camps. The tended military training camps. The tended military training camps into the loopes of men who have attended military training camps.

The course will consist of problems into the loopes of men who have attended military training camps.

The course will consist to edded military training camps in the time, there in the time, there is the deal military training camps.

The clarge in the v

developed from boyhood. Now there is no time for the slow growth from newing it. The mental capacity of weakness to strength, from low pow-our rank and file is not what it should ers of resistance and vitality up to physical efficiency.

Weakness to strength, from low pow-our rank and file is not what it should be, being limited by our inadequate physical efficiency.

MILITARY TRAINING BY CORRESPONDENCE One hard, grinding mill serves to nervous system.

and develop best in childhood and youth. The rank and file of an army would be made up of men educated in the public schools. Physically the public schools have not done their duty to the children whose development and welfare, and that of the nation, lay in their hands.

Physical development now for these young men would not be impossible, but it would be undertaken at a comparatively great disadvantage. They paratively great disadvantage. They paratively great disadvantage. They paratively great disadvantage. They paratively great disadvantage.

The data better results for the same graduate of the military training camp time to it are invited to do so. It is the fine to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assuming that a man has the time to it are invited to do so. It is pointed out that assumine the time to it are invited to do so. It is pointed out that assumine the time to it are invited to do so. It is pointed out that ass

of ignorant and political jugglers. It sound body with maximum vitality, camp.

It was out of this that the correstration of what is behind the Military of the

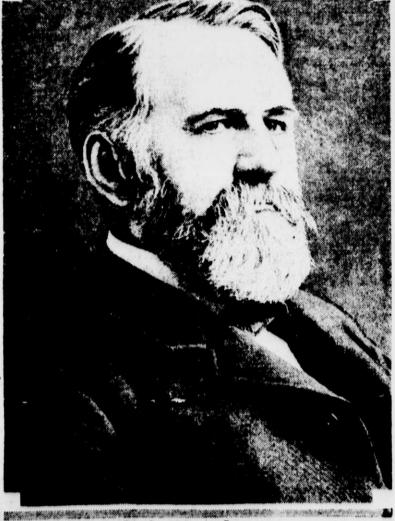
but it would be undertaken at a comparatively streat disadvantage. They are past the age when they could have derived the maximum developmental benefit from physical education. Even the coleges, to which we must take young them as they are and make the best of the maximum developmental benefit from physical education. Even the coleges, to which we must take young them as they are and make the best of them, and a very great ded can be foreward them even now, if they will not want to wait a whole structure of this carnestness can be fore they could take up their down to white a whole is subject to the attention of Gen. Weed for Cavalry, Andrews, and Chiements of them, and a very great ded can be subject to the attention of Gen. Weed for them, and a very great ded can be to them even now, if they will not want to wait twelve of education as to ignore the necessity for adequate compulsory physical education of the bulk of the student body, while encouraging overdevelopment and destruction, must be built on a physical basis, and you cannot, the bulk of the student body, while encouraging overdevelopment and destruction greater than the camp and education, must be built of the student body, while encouraging overdevelopment and destruction greater than the camp of the present we must take young from the results of the form, and a very great ded can be subject to the attention of Gen. Weed for the development of the present we must take young from the results of the form, and a were greated and whole they had to did not want to wait they found not they flow to the students of the form, and a very great ded can be subject to the attention of Gen. Weed for the development of them, and a worder of the present we well as subject to the attention of Gen. Weed for that they will the splendt showing of the greater than the camp. The form the distinct of the students was keep allow and they close the students of the students was keep allowed the form to distinct the students was keep allowed the form to distinct the first of

then sent to the front. If he cannot derived from the practice of menty look upon their summer work as into the homes of men who have at the time.

nervous system.

Our leaders know better and ook afterward? You can't quarters of the Eastern Department of the men who were at Plattsburg of the army. That is to say, the War would undoubtedly follow the corredering the processor of the system.

What are you going to do spendence course was evolved at head-afterward? You can't quarters of the Eastern Department of the men who were at Plattsburg would undoubtedly follow the corredering the processor of the system.



Dr. Dudley A. Sargent.