#### SALVING OF TONNAGE.

Whether any appreciable amount of the tonnage sent by the U-boats to the ocean bottom can be raised is a question which seems to demand more and more consideration. Many of the vessels are comparatively near to the various coast lines, and it is evident that if practical means can be found to salve these ships the returns would be very large.

The whole question is discussed in one of the latest issues of the Liverpool "Journal of Commerce" to reach this side. The hopes entertained, however, of salving any considerable portion of the U-boats' victims cannot be said to be very great. The views of the Liverpool daily are as follows:

"The vessels in question have been sunk in all parts of the ocean; it will be remembered how the famous Emden sunk about twenty merchantmen in the Indian Ocean during the two months of 1914 before her successful raiding career was finished by the Sydney, how vessels have been sunk presumably by mines in the region of Bombay and South Africa, how the Greif and other raiders have been at work in the Atlantic and other seas, and, of course, how the enemy's submarines have sunk large numbers of vessels in home waters and in the waters of the Mediterranean. The depth of water in which these wrecks lie varies considerably, from the 20,000 feet of the Indian Ocean to the few hundred feet of the seas surrounding these shores, down to the few fathoms in those cases where vessels have attempted to make for the nearest shore after being damaged, and have not quite succeeded.

"Naturally, the first information that a salvage company would require in connection with a job would be the depth of water in which the wreck lies, for, up to the present, it has been hopeless to attempt salvage jobs at a depth greater than that at which a diver can work for a reasonable space of time. The varying depths in which these sunken vessels lie may be roughly divided into three categories:

"(1) Deep, where the depth is greater than about forty fathoms

"(2) Shallow, where some portion of the vessel's masts would be visible at low tide.

"(3) Very shallow, where some portion of her funnel or upper works would be visible at low tide.

"Probably all vessels which come under class (1) have had those parts of their structure such as ballast tanks or any compartments which were originally completely watertight, crushed in by the pressure of the water unless they were full up at the time of being sunk, and as no part of the structure would be strong enough to resist the water pressure, even if it were possible for divers to work on them, the ordinary method of making compartments tight and pumping out the water to gain buoyancy is impossible. Hence there are only three methods by which such vessels could be salved, two of which require divers to work on the wrecks first and one which does not. The first is by means of direct air pressure after making airtight a number of compartments sufficient to provide the requisite buoyancy to enable the vessel to float; the second, by sinking bodies the buoyancy of which can be controlled (by air pressure) and securing them to the wreck. Both of these are well known methods which have been applied to salvage jobs in cases particularly suited to them, but, as they both require a considerable amount of diver's work, neither are applicable to the

cases under consideration. "The third method has not, as far as the writer is aware, ever been tried, nor is it likely to be until some revolutionary developments take place which do not at present appear to be within the realms of practical application. The science of electro-magnetism is well understood, and in the workshop has been applied to the lifting of considerable weights in some factories; for the picking up and carrying of scrap material it has also been utilized, but it has only been found practicable to lift a few tons by this

### ELECTRO-MAGNETIC CONTRIVANCES.

"The lifting of a few tons in the workshop by electro-magnetic contrivances is not a difficult matter, and is being done every day. Can such appliances be so developed that it will be practicable to lift a few thousand tons by such means? It must be confessed that the jump from five to ten tons to the same number of thousands of tons is a big one, but it certainly cannot be said that it is impossible. If such developments should take place, then the salving of ships in deep water might be possible, though even then many difficulties would have to be over-

come. "It would seem that even though the development

#### BRITISH SHIPOWNERS WANT INDE-PENDENCE.

Evidently not all shipowners hold a very high opinion of the effectiveness of governmental ownership and operation of ships or feel assured of its success. The chairman of Lamport & Holdt, Ltd., in his recently presented annual report, expressed distinctly different ideas from those who would sharply nationalize the mercantile marine under official guardianship, and argued rather for an open field and a fair chance for the private owner to fight his own battles and carve out his own destiny.

"While the concentration of our resources and energies for the one thing that matters—the winning of the war-has inevitably involved considerable sacrifices and the temporary neglect of important trade connections," he said, "it was a very fortunate thing for the Empire and the Allied cause that we and other great British liner steamship companies had embarked our enterprise and capital in creating shipping facilities serving countries outside the British Empire. This trade supported a fleet of steamers which have proved of inestimable value to the Allied cause in time of war.

"It has been suggested that, after the war, British shipping should be nationalized and become a State industry or monopoly. Such a course would, I am convinced, lead to the certain loss of our maritime supremacy, which, as an island people, is a vital necessity, if we are to continue to hold the place in the world we have held in the past. And for this reason-that, while the nation might possibly with advantage (though even here opinions naturally differ) nationalize railways, gas, electricity, and similar public services, because they are internal and the Government can easily protect them from outside interference and competition, the sea is and always will be open to all the world, so that shipping is in a very different position and is the very last thing to which the principle of State ownership could be safe-

"This country hitherto has been the great ocean carrier of the world, transporting produce and manufactures cheaply, not only to and from oc. own shores, but also between one foreign country and another. This position has enabled us in war time to provide the British Navy with an immense and powerful auxiliary and to bring overseas troops, munitions, foodstuffs,

"One thing is certain, and that is that after the war foreign competition will be keener than ever before. Neutrals, especially, have huge sums in reserve wherewith to build new fleets or to enlarge existing ones, while we know that Germany is making preparations on an immense scale to contest our maritime supremacy after the war. The bill for the restoration of German mercantile marine, which passed through the Reichstag last November, provided for money grants to shipowners for the construction of new tonnage amounting, on the most moderate computation, to fifty million sterling. In reply to a suggestion then made that shipping should be nationalized, the German Government stated that 'nothing was less suited than shipping to form a Government monopoly and that the effect of government monopoly would be to threaten German trade with the loss of the international possibilities of expansion upon which its greatness has been based.'

"I therefore anticipate for the British mercantile very acute struggle if it is to hold its own. Can the nation, under such circumstances, look with

of appliances should take place sufficient to give the necessary lifting power, the cost of raising a vessel by its means would be out of all proportion to the results obtained, so that we are not likely to see any serious attempts during the lifetime of the present or succeeding generation, in the salving of ships by electro-magnetic contrivances.

"There presumably will be no lack of labor in the shipyards after the war, so that the possibility of getting new ships quickly need not be doubted, and when the ship thus obtained commences work, it is known for certain that her structure is in good condition. Not so with the salved ship, however, which has been lying at the bottom of the sea for many months, possibly years. On the whole, it seems highly improbable that any attempt to salve sunken vessels on a large scale after the war is likely to be organized. Comparatively simple jobs may be undertaken, but the number of such cases will be but a very small percentage of the total number of sunken

confidence to doing so if our shipping is to be taken over and administered by a Government department? I personally hold a high opinion of British civil servants, but is any Government department likely to provide for, build up, and maintain, in good years and bad years, often at a heavy loss year after year, such services as we have fought for and held? I do not consider it probable or even possible.

"The war has shown the country that many good business men make very second-rate officials, while the training of our civil service—which service is, I believe, the best in the world-is not the best school for a business man. Therefore, I hope that British shipowners will, so soon as circumstances allow, be permitted to continue, as in the past, to use their experience, initiative, and energy, in maintaining, as I believe they can and will, the position in the world's ocean trades which prior to the war they had won."

#### BANKING PROFITS.

(New York Annalist.)

The almost unlimited expense to which some banking institutions go in providing new homes for themselves naturally excites comment on the margin of profit which they must consider a fair return in





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