

# New Method Used to Map Ocean Floor

Record Soundings Made In Atlantic Near Puerto Rico.

Prepared by National Geographic Society, Washington, D. C.—WNU Service.

The recent discovery of a new and greater depth in the Atlantic ocean, establishing a new record of nearly five and a half miles (28,680 feet), north of Puerto Rico and Hispaniola, has called attention to efforts now being made to make complete contour maps of portions of the bottom of the ocean. The new depression has been named the Milwaukee Deep, from the United States cruiser from which the record sounding was made.

"The oceans have been carefully charted near certain land masses for navigation purposes for centuries, but it has been only in the past 85 years that soundings have been made extensively in efforts to chart the floor of the oceans themselves. Cable-laying advanced the plan, but until

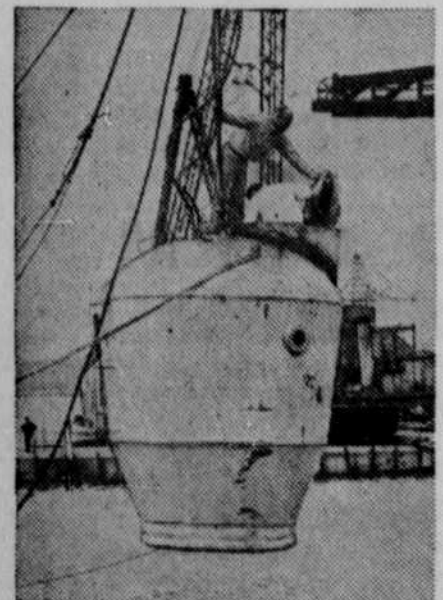


**No. 2. ACROSS AND UNDER THE SEA.** All nations strive to develop the best possible diving aids. Pictured above is an Italian diver testing a new type of diving suit to be used for rescue and salvage work. This particular piece of equipment was developed by an Italian engineer and official tests disclosed many valuable features.

recently recordings of depths of more than 6,000 feet numbered but one to every 23,000 square miles.

**Ocean Echoes Depth.** More progress has been made in recent years through new measuring methods. For years measurements had been made by the slow procedure of dropping a plummet suspended by a piano wire. To make even one sounding in 12,000 feet of water, required stopping the ship for an hour. Today, delicate instruments measure the time it takes the echo of a sound at the sea's surface to return from the bottom, thus measuring the distance by the speed of sound. This can now be done while a ship is moving rapidly and many commercial vessels, equipped with the sonic measuring devices are speeding the work.

Sound travels almost five times as fast in water as in the air, so that the speed under water is close to a mile a second, thus indicating the delicate accuracy with which the time of the returning echo must be recorded. The problem is complicated by the fact that the speed of sound in water varies with the



**No. 4. WHEN THERE IS LIFE TO BE SAVED.** In the recent Squalus submarine disaster a diving bell similar to the one shown here was used. By means of this kind of equipment the navy was able to rescue 33 men from a depth of 240 feet. This was the first actual life-and-death test of this particular diving bell and it was found to be very satisfactory in such manner of rescue work.



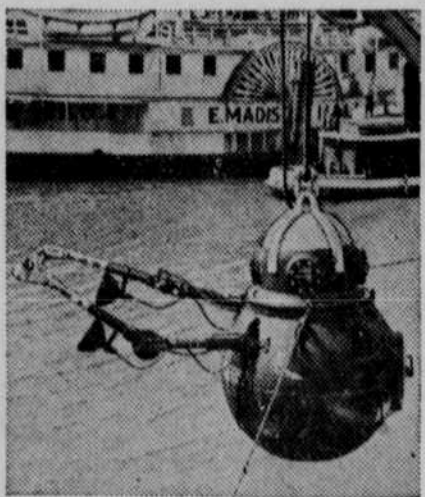
**No. 1. A NEW SAGA OF THE SEA.** Since the first time men have ventured toward the ocean's floor they have been using equipment similar to the standard diving suit pictured here. Although numerous safety devices have been advanced since these beginnings this type is still almost universally used.

amount of salt in the water, its temperature and varying pressure.

**Great Changes Seen.** The comparative shallowness of the sea in many places has been vividly suggested in the great changes that would be made in the boundaries of countries and continents were the surface of the ocean to sink only 600 feet, a little more than the height of the Washington monument. Ireland would then be joined to England, except for the North channel. England in turn would become part of the mainland of Europe, the water of the English channel having run out. A strip 1,500 miles wide would connect North America with Asia. New Guinea would become part of Australia.

The broadest ocean surfaces are in the Southern hemisphere, but north of the Equator occur the greatest submarine upheavals, deforming the bottoms of the Caribbean sea, and the Atlantic and Pacific oceans, in a broad expanse from the latitude of the Panama canal to that of Philadelphia. In these regions, especially in the Pacific, vast plains and plateaus, tall peaks and deep canyons form another world. In the shallower portions ocean currents are the breezes that sway submarine trees, and fish are the variegated birds flitting among the branches, while varied coral formations look like flowering shrubs.

**Atlantic Floor Uneven.** Down the middle of the Atlantic, extending 8,000 miles south from Iceland, runs a mountainous ridge almost 10,000 feet above the adjoining basins. Soundings already re-



**No. 3. FORTUNE LURKS ON OCEAN FLOOR.** Not only do nations seek to develop diving equipment to aid in rescue work but fortune hunters dream of riches on the ocean floor and they too advance the science of diving. The Romano diving bell shown here is built to enable a diver to work a mile below the surface. This is a depth where the ordinary diver could not venture because of the terrific pressure.

corded indicate that three-fourths of the Atlantic is at least 6,500 feet deep, and over half is 13,000 feet deep.

The Pacific has more great depths than any other ocean, according to the records of the Hydrographic office of the navy department, which show eight in excess of 30,000 feet. The deepest hole in the Pacific is 35,400 feet, just northeast of Mindanao of the Philippine islands. This is the greatest recorded ocean depth in the world. The record in the South Pacific ocean is 30,930 feet; North Atlantic, the new Milwaukee deep, 28,680 feet; Southern Atlantic, 26,575 feet; Indian ocean, 22,968 feet. A sounding of 17,850 feet is recorded in the Arctic ocean, and one of 14,274 feet near the Antarctic continent (in the South Pacific).

Scientists admit there is still much work to be done but look forward to the time when deep soundings will be sufficient to chart all the mountains and the valleys on the ocean floors—the "epirogeny" as oceanographers call it. Some visionaries of the Jules Verne type look forward to the time when great window-walled submarines with powerful searchlights will carry photographers and tourists on extended trips into the depths

# NATIONAL AFFAIRS

Reviewed by CARTER FIELD

*Amazing angles turn up in battle Roosevelt is waging over amendment of the neutrality law . . . Sentiment seems to be that Senator Norris of Nebraska is due for a deflating . . . Monetary bill not likely to become an issue in the coming presidential campaign.*

WASHINGTON.—The battle President Roosevelt is waging over the amendment of the neutrality law has some amazing angles. To begin with, scarcely any intelligent observer, unswayed by politics, really believes that any law that congress could possibly pass will insure keeping the United States out of war. And as to neutrality, as Bernard M. Baruch told the senate foreign relations committee, "There ain't no such animal."

Any possible law will hurt one side or the other in any major conflict. It is openly admitted that the sort of law the President wants would probably favor France and Britain as against Germany and Italy in the war everybody is afraid of right now. And curiously enough everyone admits that the continuance of the present law favors China in the struggle against Japan, as long as it continues to be an undeclared war, but would favor Japan the moment two-year conflict became a declared war.

But the present law, for the preservation of which a new battalion of death has been organized in the senate, bans shipments to belligerents (in a declared war, of course) of "arms, ammunition and implements of war." There is no mention of food, or of steel or cotton which can be made into explosives. And there is very little prospect that any determined fight will be made to include those. Yet actually they are of the essence.

## Food Most Important of Articles We Might Export

Looking at the situation practically, of all the articles that this country might export to the nations mentioned as being favored by the President's plan, food is the most important. The rest of the things follow so far behind as to be relatively unimportant. In a big long drawn out war it is starvation, both of her army and navy and of her civilian population, that Britain fears most. France is pretty nearly self-supporting, leaving out the possibility of extended occupation of her territory such as occurred in the World war.

Everyone knows also that lack of foodstuffs was one of the elements which operated potently to bring Germany to her knees in the World war. The darkest days of that war, from the standpoint of the allies, were those when there was terror that the German submarine blockade might starve out England.

It is common knowledge that England has been stepping up her arms and munitions and airplane production to the point where supplies of these war materials may not be of pressing importance. The longer the outbreak of war is delayed, the less important these particular imports will be. The rush buying of planes and munitions by Britain and France in the last year from this country was against the possibility that war might break out before their own productive capacity was adequate.

Of course they will continue to need the raw materials. But none of these is barred in the present neutrality law. So that the situation is presented that the neutrality bloc in the senate is staging a heroic battle to prevent shipment to France and Britain of things that they probably will not need when war comes, and is doing nothing to prevent shipments, at that time, of things that Germany will probably be doing her utmost to prevent Britain and France from getting.

## Monetary Bill Not Likely to Be an Issue in Campaign

There is much talk about the monetary bill being an issue in the campaign but, while it is of course impossible to say that it will not be, it would seem that the probabilities are against it. It is far more likely that, as far as the voters are concerned, it will be forgotten.

Had the revolt against President Roosevelt succeeded, that would have been something else again. Had the net result been that the government ceased its subsidizing of domestically mined silver, that would have been decidedly a couple of other horses. It might easily have been the decisive element in determining who is to be the next President of the United States.

Then, the silver mine owners and the silver mine employees would have had reason to remember, with resentment, the whole affair. It may be that the President's remarks at Hyde Park, attacking the Republicans for supporting higher silver prices, would have redounded to the benefit of the Republicans.

ting before. It is not important politically. Even if it were terribly important economically, which it is not, it would have been a settled fact so long before the heat of the campaign develops that only a few persons would have been interested. It may be that the Republicans will be able to make some use of the continued subsidizing of foreign silver. Few persons inside the United States are in favor of that, and these few only exporters to silver producing countries, of which, after Mexico is named, there are few.

## Important Factor Is if Something Else Pops Up

But that issue also may result in indifference on the part of the voters. The important factor there is whether anything else happens to keep public interest in it alive. For example if, during the presidential campaign, Mexico is still being held up to the public, because of news events then, as treating American capital badly—if she happens to be selling the oil from the wells she confiscated from Americans, for example, to Germany—this particular subsidy will hurt the Democrats considerably.

This subsidizing of foreign mined silver is a very difficult thing to defend, on the stump. There are business men who favor it, business men with things to sell to Mexico and other silver producing countries, but naturally such individuals are the rare exception when it comes to calculating voting strength. They simply do not count.

So, if it happens to be a dull campaign, with very little to interest the voters, this foreign silver situation just might happen to be important, especially as none of the rank and file of the Democrats would be interested in defending it.

Or, if Hitler should be raising Cain at the time, with Mexico apparently on the side of the dictators, it might easily become a tremendously important issue.

## Senator Norris of Nebraska Seems Due for Deflating

If one may predict the toppling off their pedestals of present idols by the same rules which have generally worked in the past, Sen. George W. Norris of Nebraska is due for a deflating. He has run up against that curious and hard to understand intangible—pride in itself of the house of representatives. He may or may not win this time—in the conference row over that TVA hundred-million-dollar bond authorization. But he has hurt the pride of the house, and the wound will not heal. Nothing lasts forever, and the members of the house as well as the senate were getting a little tired of the Norris dictatorship anyhow.

So when Norris appeared as the only senator to represent the upper house in the conference on the TVA bill, he was taking a chance. He ought to have realized it, but dictators gradually grow callous to pride in other people.

Members of the house generally might not ever have known about it, but Andrew J. May of Kentucky, chairman of the house military affairs committee, was enraged at Norris' unyielding attitude. So he issued a statement which began:

"Responsibility for the present stalemate of the house and senate conferees . . . is squarely on the shoulders of Sen. George W. Norris. It is a sad commentary on our democratic system of government that one member of 'the most deliberative body in the world' does not know the meaning of the word compromise and presumes to impose his will, arbitrarily and arrogantly, upon the house of representatives."

## No One Wants to Get Into Controversy With Norris

Those are pretty nearly fighting words to the house! Or at the very least, they are calculated to bring about a declaration of independence. One may wonder why Uncle George laid himself open to the attack. Not by his stubbornness. No one who knows Norris would expect anything else. But by his very delight in the fact that the other senate conferees were entirely willing to leave everything to him—thus putting him in the position of one man telling the house what it could and could not do!

It is not at all surprising that the other senate conferees did not attend the meetings. They did not want to get involved in a controversy with Norris. Nobody does. It is not very healthy politically. When everybody assumes that one's antagonist is absolutely honest and sincere one starts out with two strikes and an unfavorable umpire. And it was so easy to say to Norris, "You just go ahead and chew those house fellows up. We are behind you 100 per cent." Especially as his fellow senators had such marvelous excuses for looking out for the interests of their former constituents in the agricultural bill.

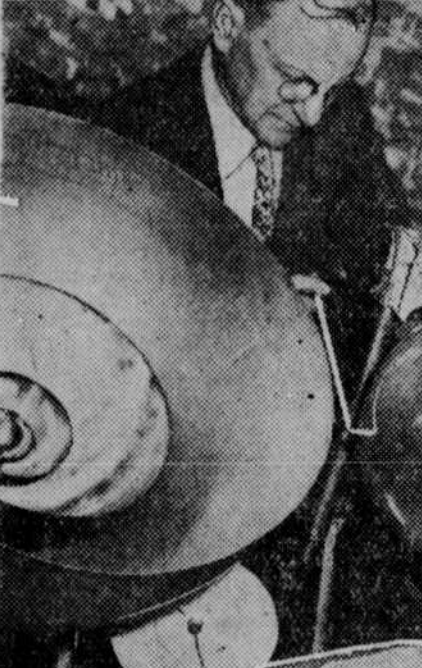
But the house members didn't like it at all. They are very jealous of the senate anyhow, though individually most of them aspire to togas. There is no more sure-fire appeal than an appeal to the pride of the house as against the senate. Moreover, there is a new generation in the house that knows not Joseph. Almost nobody is left who served with Norris when he was battling against Uncle Joe Cannon. To many of the newcomers he is just a tiresome tradition.

(Bell Syndicate—WNU Service.)

# Not So Hot! Weather's Warm But These People Know Tricks



From mid-July to late August most of America expects its warmest weather, although the sun has already started its return trip to the southern hemisphere. But enterprising and uninhibited Americans have found many ways to escape the heat. For example: In Detroit (above) sweltering citizens congregate around spraying hydrants. This method is most popular in New York's tenement district. Right: A happy, young lady indulges in a distinctly American summer treat.



Above: On the beach near Gloucester, Mass., another lady finds the temperature of 94 not so bad. Left: Professor Charles M. Heck of North Carolina State college kept cool last summer making a "heat survey" from various levels of New York's lofty Empire State building. He is shown here testing his new "prophesying" instrument. According to Professor Heck, heat rays rising from the earth are absorbed by moisture in the air and then re-radiated. Most heat sufferers don't care — but that's science for you.



It's done in the best of city and small town families on those hot nights when beds feel like blazing infernos. This Chicago couple followed the crowd, taking baby right along and covering his buggy with mosquito netting while mother and dad sprangled comfortably on the ground. When dawn peeps over the horizon they'll head for home and breakfast.



# WHO'S NEWS THIS WEEK

By LEMUEL F. PARTON

NEW YORK.—Within the exploits of men of achievement may—and often does—lie the favoring element of chance, frequently recognizable. But often, too, it is hidden in a vague background of contributory factors.

In Jascha Heifetz's agreement to appear in a forthcoming motion picture, Samuel Goldwyn's pow-

## Way Smoothed For Success of Sam's Exploit

ers of persuasion once again excite the envy of his rivals and the admiration of his friends. The eminent violinist's personal aversion to the screen as a medium of expression has long endured in the face of repeated offers. Mistrust of sound track reproduction of the notes of his beloved violin was joined with his repugnance to the elemental music he believed he would be called upon to play and, above all, was his objection to strutting the screen as an actor. So Goldwyn's success in overcoming the great musician's reluctance is now being proclaimed.

Yet, lying back of Heifetz's name on the dotted line of a Hollywood contract are various imponderable factors. His wife, for instance, who was Florence Vidor of screen fame, may have been the influence behind his first appearance on any stage in a histrionic capacity. This was last spring when he took the role of a hill-billy fiddler in the annual show of a sophisticated midtown club, of which he is a member. Garbed in overalls, cotton shirt and red wig topped by a broken down straw hat he played "Turkey in the Straw," violin upon his knees, as the time-honored jig tune has never before been played. And for an encore there was "Danny Boy."

So who can say that the siren voice of Sam Goldwyn was not merely the fanning of a flame lighted when, with gusto and amid wild acclaim, he saw a violin lying across his knee?

Born in Vilna in 1901, Heifetz's American debut came in October, 1917. An American citizen now, he lives in Redding, Conn.

Sam Goldwyn it was who lured Maxine Elliot to the screen back in 1917 and she was but a predecessor to such exalted artists as Geraldine Farrar.

## PAUL ROBESON'S magnificent bass voice will have adequate opportunity for expression in his portrayal of the title role of Sam Byrd's forth-

coming production of a play adapted by the author from Roark Bradford's John Henry stories. There will be incidental music by Jacques Wolfe.

One often marvels at events, apparently casual at time of occurrence, which are found significantly to have affected human lives and so shaped destinies. When Paul was a senior at Rutgers, where he had won high scholastic honors and gained for himself a national reputation as a football end, he was looking toward the cloth as a profession. His father was a clergyman in a small community in New Jersey and, from boyhood, Robeson's idea had been to follow in the paternal steps.

Not long before graduation, the elder Robeson died and among the funeral arrangements was a plan to have the presiding bishop of the church conduct the obsequies. Accordingly, the prelate came to the scene of the funeral from his home in a village in the southern part of the state and after the services he addressed the assembled mourners substantially as follows:

"Brothers and sisters, I had to borrow the money to come to this scene of sorrow and unless you all contribute to defray my journey home, I am afraid I shall have to walk."

Whereupon, of course, the necessary traveling fund was raised. After a while the bereaved son met the late Foster Sanford who was his football coach, his guide, mentor and friend.

"You are still headed for the ministry?" Sanford asked.

"Yes sir," was the reply. "I still am, sir."

"The highest you can ever get to be in your church is a bishop, isn't it?" Sanford asked and when Robeson said that was true, the coach fixed him with his compelling blue eyes. "And so you are going to enter a profession where, even as a bishop, you will have to borrow money to get from north Jersey to south Jersey."

That was all that was said. But next day Robeson came to his friend, confiding his intention to plump for the law and for voice.

(Consolidated Features—WNU Service.)