

## A MARVELLOUS STORY OF THE SEA

FACTS CONCERNING SALVING OF MEN IN SUBMARINE K13

Through an Accident in Testing a New British Sub, the Crew Were 5 1/2 Hours Under Water.

This story has been left untold for two years! The censor sat on it! K13 was a Fleet submarine of a new type, more like a submersible destroyer than an ordinary underwater boat. Fairfields, of Govan, built her, and even now it were unwise to be too explicit in description. But some few details are necessary for an understanding of Mr. Coplestone's story. "She was over three hundred feet long and displaced 2,000 tons when submerged. "She was accepted for the Royal Navy by the Admiralty officials. "The Unexpected Happened. "Then it was that the unexpected happened, as it always does at sea. Herbert decided to take once more dive perhaps just for luck, perhaps to satisfy himself upon some nicety of trim. He gave the order to close down and dive, and the K13 dived. "Though the order had been given not to speak, any of them could see that the order had been carried out, the ventilators had been left open. Instantly the water poured into the engine and boiler rooms, drowning those within, and the K13 sank by the stern. The water flowing towards the control-room bulkhead compressed the air in the room, and indicated immediately what had happened to the alert senses of Commander Herbert. "Our ears began to sing," say those who were within the belly of the ship.

5 1/2 Hours Under Water. "It was ten o'clock on Wednesday evening, January 31, fifty-four and a half hours after K13 had sunk, that her forty-nine survivors emerged into the blazing air lights which shone from the Ranger's masts. They could not speak, many of them were dazedly walking. One by one they were helped by kindly hands along a gangway to a tug and thence to the shore. They stumbled ashore, unconscious of the cheers which greeted them, gazing without recognition upon the friends who welcomed them. And so to Shantou, where they were laid straight into hot baths and lifted thence into bed. For they were numb and perished with cold.

Manoeuvre Well Executed. "It is always cold in a deep-diving submarine, even in high summer; in the bowels of K13, lying seventy feet deep in the Northern mid-winter, the cold, though little noticed at the time, had been paralyzing. Forty hours of bad and poisonous air, fifty-four hours of bitter cold, had brought the bright flame of these men's lives down to a poor flicker. But recovery was rapid, and not one of the survivors disappointed by dying those who had saved him. "Twenty hours after the last man had been plucked out of K13 the hewers which held her up parted and she sank to the bottom of the Gareloch.

"The world did not ring with news of the story which I have told, for the censor forbade. But His Majesty, who was a sailor before he was a King, and remains first and always a sailor, sent to Bartlett a telegram of which the purport, rendered in the language of the naval signal book, ran 'Manoeuvre Well Executed.' "Salvage Extraordinary. "It is an amazing story which Mr. Coplestone tells of how the salvage ship Ranger threw hawsers round the K13 and then set to work to cut the nose off the submarine, as if it were the end of a cigar—and thus provide an exit for the imprisoned men.

Before this was done the co-operation of the men within the submarine had to be secured. And first of all they had to be supplied with fresh air and communicated with by Morse messages hammered on the skin of the submarine. "The long, flexible tubes, seven

inches in diameter, which was to open up a clear passage between K13 and the upper air arrived at 4 a.m. on Wednesday morning, but it was not until four hours later that it was in place and in effective operation," says Mr. Coplestone. "To the eager salvors the delays were exasperating; there were many more delays, even more exasperating, to be suffered before their job was finished. They had to explain to the effected folk within precisely where the tube was to be fixed up and how they were themselves to complete the open passage. The tube was designed to screw, by means of an adaptor, into an ammunition hoist, and, when this was done, it needed but the removal of the retaining plate inside to put the device to immediate use.

By Morse. "When the salvors had done their part it was for the prisoners to do the rest—to remove the inner plate as quickly as they pleased. But when it came to explaining this not very complicated operation by tapping out messages in Morse on the deck it was by no means easy to get K13's survivors to take it in. By patient repetition that was done at last, and then the divers busied themselves with fixing up the tube.

"They had to measure the screw threads, so that the adaptor might be made to fit accurately and to prepare a packing of tow soaked in tallow to exclude the water. A salvage steamer is a travelling workshop and divers are skilled mechanics, so that this part of the job, though it might consume time, presented no difficulties. By eight o'clock on the Wednesday morning the tube had been screwed firmly into place, the inner plate of the hoist had been removed, and the men, who had for forty and a half hours lain buried in a steel coffin, were at length enabled to draw into their impoverished lungs air which was free from pollutions."

### FLYING AND FEAR

Tests Imposed on Pilots by the R.A.F. Medical Board.

It might be thought that any young man who was a good sportsman, and who had no idea what fear was, could be a pilot; but this is not the case. One of the most remarkable things the Air Force doctors have discovered is that the best pilots are those who know what fear is, though they may not show it.

Fear affects the blood pressure and circulation, two most important things in a pilot, who must have a first-class circulation to withstand the sudden changes of temperature and to be able to breathe at the great heights to which his aeroplane rises. The prospective pilot must be an extremely rapid thinker, and must be able to do the right thing almost in a flash, as it were. The R.A.F. medical board has a special test to find out whether a man training for a pilot is suitable or not. He has in front of him an electric key and an electric lamp. The doctor examining him switches on the light, and the flying candidate must press the key in front of him as soon as he sees the light. A special apparatus registers to a thousandth of a second the interval between the lighting of the lamp and the pressing of the key, showing how fast the prospective can think and act.

### "COMRADES OF THE MIST"

Admiral Beatty's Farewell to the United States Navy.

Admiral Sir David Beatty was in one of his happiest moods when addressing the American sailors the other day aboard U.S.S. New York. "I hope," he said, "that in the sunshine which Admiral Rodman tells me always shines on your shores you will not forget your comrades of the mist and your pleasant associations of the North Sea. This is a queer place, as you found, but you were not the first to find it out. There was a great explorer Marco Polo, who, after travelling over the world thirty years, one day found himself in the North Sea, and then went home, went to bed, and did not travel any more."

In France at one time only those of noble birth were allowed to be glass-blowers.

## THE ROAD TO THE RHINE

TREK INTO GERMANY AS SEEN BY A BRITISH OFFICER

Graphic and Stirring Pen-Picture of the Most Remarkable Journey Tommy Has Ever Underaken.

After fifty months of war the ambition for which more than six hundred thousand Britons have died has become reality, and the Allied Armies are marching into Germany. None knows what lies before the Army of Occupation, but it may be that even the jocular notice, "To Berlin," chalked on the trucks within which the Expeditionary Force entrained at Boulogne in August, 1914, may yet be translated into fact.

In the short space of a few weeks—almost overnight, one might say—the whole situation has changed. The month of November, which opened to the roar of guns, the rattle of machine guns, accompanied by all the discomforts of long, wet nights in the open and stubborn engagements with the enemy's rearguards, closed with the march into Germany under what are practically peace conditions, writes a British officer in December.

The Land of Chateaux. The Meuse crossed, running deep and clear through rocky tree-clad heights dotted with the summer residences of prosperous Belgians, the troops advanced into a delightful region of forest and mountain and gorge and valley, with trout in the streams and wild boar and pheasant in the woods.

It is the land of chateaux—no longer substantial country mansions dignified by the name in France but fine seigneurial seats, many of them moated and surrounded with handsome parks and invested with historic associations. Hardly a village that has not got its chateau—either such as I have described or an imposing red brick pile built to its taste by some rich Belgian manufacturer. In this charming countryside the Boche sat down and took his ease. He established his generals in the best of the chateaux, where they made rather elephantine attempts to be courteous to their unwilling hosts. The officers made themselves quite at home. They shot the game in the woods with such characteristically Prussian thoroughness that in places where pheasant and partridge abounded a year or two ago, now hardly one is to be found. The German private soldier, with equal ruthlessness, trapped and snared and destroyed to his heart's delight, so that in places the very song birds of the forest have been exterminated, and the woods lie wrapped in silence utter and complete.

German "Thoroughness." The legends about the "simple" German people—the legend of cleanliness—has been absolutely destroyed by the lessons of this war. The German seems to be a wholly dirty animal. One might have thought from the high repute of German doctors, that the German Army would have led the world in matters of hygiene, but our experience of the German in this war, from first to last, has proved that the most elementary rules of hygiene are systematically neglected by the German army.

In the days of trench warfare their trenches were bad enough, but the front line covers—or rather, was sometimes allowed to cover—a large multitude of sins. But the lesson taught by those dirty and unsanitary German trenches is repeated and driven home by the indescribable filth of every billet in which the Germans—officer or man—was housed in Belgium.

In every billet where British troops have followed on the heels of the Hun they have had several hours' hard work cleaning away the rubbish and making the place comparatively habitable. The Hun is a foul creature, and the Belgians demonstrate their gladness at the departure by the unrestrained warmth of their welcome to the British. Every village even the smallest had its triumphal arch constructed of two tall fir trees connected by festoons of greenery or colored paper, and hung with por-

traits of the King and Queen of the Belgians, or scrolls bidding welcome to the Allies.

The villagers have shown the greatest ingenuity in devising decorative schemes to demonstrate their delight at the arrival of their deliverers. Shields with suitable devices inscribed in bright paint, or sometimes even worked in colored woods, are affixed to such different edges of vantage as a railway bridge or the street lamps.

Guy Fawkes Up to Date. One small town planted its main street with fir trees set every dozen yards or so, and hung with colored paper, a decorative scheme as bright and effective as it is novel.

Last, but not least, there is a symbol of victory not infrequently encountered, which the inhabitants never fail to point out with glee to the British soldier, and that is a Hun "guy," or effigy dressed in German uniform, its head (made out of a turban) surmounted by a "conicscuttle" shrapnel helmet, suspended from wires hung across the street, swaying in melancholy fashion in the wind. "Boche kaputt!" say the yokels cheerfully, pointing at it, at the same time drawing their finger across their throats in that expressive gesture which the civilians of Belgium both use habitually when the hated name of Boche is on their lips.

The British soldier bound for the Rhine is but a fleeting guest in the liberated territories to-day. But he is none the less welcome, and the Belgians unite with remarkable unanimity in making him feel at home in their midst.

When the visitor, at the end of his long day's march, has doffed his heavy pack and equipment, installed himself in his billet and "cleaned up," there are cheerful groups in the kitchens of all the village houses, where Madame is at home to her British guests.

### A COLD CURE

Try an Air Trip Twenty Thousand Feet Above the Earth.

"A ride on horseback every morning? Certainly not, my dear sir! An hour's sky-ride is what you want—the finest tonic, the greatest healer in the world. Beats physic all the time." That will be the recipe for health in the future. There is no influenza at ten thousand feet, and at twenty thousand the atmosphere, though rare, is as pure and unadulterated as a mountain stream.

As every disease has its own peculiar and particular organism which sets up, and keeps up, all the mischief of the way to escape disease is to go where there are no germs, where the supply is cut off, where no germ, no microbe, no disease culture can grow or even live. For instance, although it is mighty cold up there, and our high fivers often feel the nip of the high altitudes and have to wrap up like Arctic explorers, they never "catch a cold," as we say, for a "cold" is dependent for its initiation and continuation on a living organism, and that organism is not there to "catch." Moreover, if a man is sneezing and blowing his nose as he takes his seat and grips his joy-stick, he ceases to do either of these things when, in a few minutes, he finds himself at the easy altitude of Mont Blanc. The cold kills the "cold."

Yes; flying as a health-restorer may shortly be the favorite medical stimulant. Headaches, colds, bronchial affections, nerve trouble—it sounds like an ad for somebody's pills—take to flight when you fly.

### Sentry Humor.

General Pershing was commenting the other day on the excellent spirits of his men in France. Their sense of humor, he says, has saved the situation many a time. On one particular occasion a division was quartered on the river bank. It had been shocking weather and, added to the ordinary discomforts of mud, rain, and bitter cold, a thick white fog had enveloped the men for almost a week. A man on sentry-go heard footsteps. "Halt! Who goes there?" he cried. "Friend," came the answer, and the man recognized his colonel. "Welcome to our mist!" he answered. It was a breach of military etiquette, but the colonel knew the value of Mark Tapley, and passed on, smiling.

# THE AUTOMOBILE

Concerning Gasoline.

The necessity for fuel conservation has brought the subject of gasoline very prominently before us, making it a frequent topic of discussion. The fact has impressed me," says an authority on automobiles, "that very few people know its most simple properties. Every one knows how powerful it is and how dangerous, but few know how safe it is and how properly to handle and store it."

It is generally known that gasoline is derived from crude petroleum by a process of distillation. Other products are kerosene, lubricating oil and greases, and paraffine, all used about an automobile. It has no color of its own. It boils at a temperature from 115 degrees to 160 degrees Fahrenheit, depending on the grade. It is composed of two such dissimilar elements as hydrogen and carbon. The latter is familiar to us in the form of charcoal and hydrogen is a gas, one of the constituents of water. It is a remarkable fact that two such elements as hydrogen and carbon should combine and form a substance with none of the characteristics of either of them.

The dangerous nature of gasoline is well known, so that it will not be necessary to emphasize the following details of care necessary in filling tanks: Stop the engine, so that the

### A BIG FALL

How It Feels to Drop Four Thousand Feet.

"What does it feel like, falling through the air?" This question, which a few years ago would not have concerned anybody, has now a fanciful interest for everybody who flies, and who can doubt that, in a few years' time, most of us will be flying regularly? It could not have been answered at all before the war because we had nothing to go upon. Now we have the experiences of several balloon observers and aeroplane pilots as evidence.

The answer one would be inclined to give off-hand is that a big fall through space is not felt at all. The momentum of the fall, it is thought, combined, perhaps, with the paroxysm of terror which must seize one, causes unconsciousness. There are many cases which seem to show that this is what happens. Though most flying accidents are fatal, a surprising number of pilots survive a big fall, and the unanimous testimony has been that the pilot knows nothing about the fall.

The hurried incidents of a second or two before the fall are remembered, but as soon as the machine is lost control of in a headlong drop, the pilot loses consciousness, and if he survives, knows no more till he "comes to" in hospital.

But there are other cases which prove beyond doubt that a terrible fall through space does not always cause unconsciousness. I know two cases of balloon observers whose parachutes did not open after they had jumped, till the last moment; they say that, till their parachutes opened, they were perfectly aware of their position and that they were being hurled to death. Parachutes, although designed to open after 200 feet, frequently do not open under 1,000 or 1,500 feet, and during this drop the men tied to them are quite conscious.

A noteworthy case is that of an observer in the Amiens sector last June whose parachute did not open, and who fell, by a miracle, on the elastic branch of a tree, which tossed him gently into a marsh, where he picked himself up unhurt. He said he was perfectly conscious throughout the 4,000 feet fall, and, moreover, serenely confident that nothing ill would happen him.

The fact seems to be that there is far more likelihood of a fall caused by being unexpectedly thrown into the air than there is during a fall which is the result of deliberately jumping.

### SCAPA FLOW

The Harbor in the Orkney Islands Where German Fleet is Interred.

I have my revenge at last, says a British seaman. For four long winters I have been based on Scapa Flow, a harbor in the Orkney Islands large enough to hold the fleets of the world, and now the German High Seas Fleet, which has kept me at Scapa during what should have been the best four years of my life, is to be interred there itself.

Scapa is known by Navy men as "the last place on earth"—but it is really only in the midst of winter that this title is deserved. Then there are only about seven hours of daylight and, owing to the rough seas, communication with the shore more or less ceases. When the better weather arrives, parties are landed from the ships for recreation on the various islands. On the island of Flotta, the officers and men of the Grand Fleet have made a first rate golf course of eighteen holes, and this is the chief attraction at Scapa. This island also has several football and hockey grounds. Several ships have cultivated plots of land on the island of Fara, and have quite useful vegetable gardens. Unfortunately, however, the ship sometimes leaves for another port just when its best produce is waiting to be gathered, and on its return is perhaps nicely ready for next year's seed.

In the early days of the war men were much inconvenienced by having nowhere to shoot, but in 1915 the S. S. Borodino was chartered by the Junior Army and Navy Stores, who started a shooting branch of their establishment at Scapa. This ship indeed came as a blessing to the Fleet, for she contained a laundry and a hairdressing salon, and in the shop were to be purchased all manner of articles and luxuries which help to comfort those who "go down to the sea in ships."

The after-ward of the S.S. Gourko, a provision ship and sister of the Borodino, was early in 1916 turned into a theatre, so that while in the daytime the Gourko carried on provisioning the Fleet, at night she was able to lay alongside any warship requiring accommodation for a concert.

Our surgeons will always have a good word for Scapa; its air is most bracing, and with the climate slightly warmed by the Gulf Stream, it might almost be called a health resort.

Repair work absorbs about 40 per cent. of the labor and machinery of British shipyards.

## BRINGING UP FATHER

