

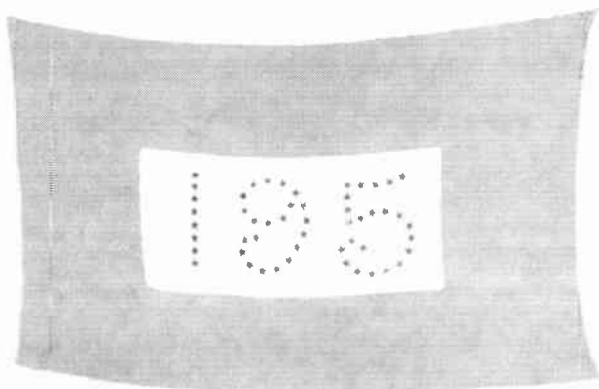
MARCONI SERVICE NEWS

Volume 3

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JULES VERNE UP-TO-DATE

or

A DESCENT INTO THE HUN'S PARADISE

By P. B. Collison

This magazine in the past has chronicled many hair-raising tales of encounters with submarines. In all of these accounts the sub was given the villain's role and little mention was made of the marvelous devices which make its capture so difficult. Having recently spent two months aboard a fleet of six of these mechanical fish, during which I went on several trial trips, I believe I can give a fairly accurate description of their working parts.

Because of the publicity given to its piratical activities, the outside of a submarine is familiar enough to all. I will therefore dwell lightly on these features. The particular boats which I surveyed are nearly two hundred feet long, blunt nosed, with a long, tapering tail. From a birdseye view they resemble huge fish. Along the backbone is placed a light, flat superstructure or deck containing four small circular hatches which are surrounded by a light bronze cable supported by detachable stanchions. There is also a long slanting hatchway through which the torpedoes are lowered into the hull. A collapsible crane is provided to swing these long, slender, miniature submarines aboard, for they weigh close to a ton and sometimes more.

The next point of interest is the conning tower from which protrude the antenna-like periscopes. The latter are protected and supported for a part of their height by curved, flat plates called shears. These shears are made in a form to lessen resistance when the boat is running submerged. The conning tower with tiny glass ports is placed just forward of the periscopes and likewise is protected by shears. A small bridge encircles the top of the tower and on this are mounted an engine room telegraph, electric steering gear control, and gyro-compass repeater. These are placed in a small watertight case supported on a pillar much like an ordinary compass stand except that it is made entirely of metal. When the boat is operating beneath the surface a water-tight lid is screwed down over these controls. All movements of the boat on the surface are controlled from this point.

The wireless mast and deck insulator are located just at the point of the shears, for the Radio equipment. A very heavy electrose insulator set on the top of a heavy brass pipe with another electrose insulator placed at the bottom brings the lead-in wires to the apparatus. The wireless masts (of which there are two) are hinged at the deck and are lowered and lashed fast when the order is given to prepare for a dive. The stern portion of the hull superstructure contains the engine room hatch and then the hull tapers off to the tail which supports two screw propellers, and the vertical and horizontal rudders.

So much for the general appearance externally. We will now enter the hull through the hatchway nearest the bow. This hatchway is only eighteen inches in diameter, distinctly no place for a fat man. Upon entering the hull you must keep your head down and your eyes wide open. The deck space being rather limited all machinery pos-

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sible is hung from the shell overhead leaving scant headroom. I can truthfully state that my first impression upon entering a submarine was a dent caused by unexpected contact with an anchor windless motor. This was fastened on a level with my face just back of the entrance ladder. One lesson was enough; for ever afterward I ducked when I went down that ladder.

The first things to greet us upon entrance are the stingers or torpedo tubes of which this boat was equipped with four, two above and two below. Water is prevented from entering the hull when the breech plates are opened to place a torpedo in the tube, by an outside swinging bow cap. The complete procedure is to close the bow cap, then drain the tube, and by means of a small traveling crane place the torpedo in the tube. The bow cap is then turned and air at pressure of 2,800 lbs. to the square inch is admitted behind the torpedo. This drives the torpedo out with a rush and as it leaves the tube a small trigger is forced back which sets its tiny compressed air turbines into motion. The torpedo will go forward until the air pressure will no longer drive the turbines. If it has missed its mark its sea-cocks are set so it will sink. Otherwise it would float about on the surface, a menace to friend and foe alike. Each of these vessels were supplied with eight torpedoes, four in the tubes and four on racks inside the hull. The space underneath the floor of this forward compartment is taken up by ballast tanks, fuel tanks, room for several air flasks and a storage battery well. The fuel tanks hold 5,000 gallons of oil and the forward battery compartment holds 60-3,500 ampere-hour storage cells. Some battery! The sides of the shell give space for the lockers which contain the bedding and personal effects of the crew. The men sleep on cots when the weather is good, but in bad weather they sleep in hammocks swung from the shell overhead.

This compartment also contains the wireless apparatus and the underwater signaling apparatus. The latter device consists of two immense thick diaphragms set one on each side of the bow. The diaphragms are set into oscillation by solenoids through which pass a 500-cycle alternating current of about five kilowatts. The sound waves sent through the water travel up to forty miles or more depending on the depth and density of the water through which they travel. The deeper the boat is submerged, the further they can signal. A regular telegraph key is used and by means of the Continental Morse or any other code communication is carried on in a manner similar to Radio. The wireless operator is in charge of the underwater system as well as the radio apparatus.

Through a watertight bulkhead we next enter the brains of the boat. This portion of the interior is known as the General Operating Compartment and it contains a staggering number of air and water gauges and valves which control the buoyancy of the hull. One of the largest dials shows the depth at which you are operating. It runs up to 200 feet! There are also large brass wheels controlling the horizontal or diving rudders and the vertical rudder. Another gyro-compass repeater is fastened on the bulkhead in front of the helmsman. A small ladder leads up into the conning tower which is separated

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from the main hull by a small watertight hatch which can be closed from beneath in case the conning tower is damaged by shell fire. Up here we see more gauges and appliances, also one of the periscopes. You look into an eyepiece similar to a telescope, and by means of large control handles the barrel can be swung around so as to view any portion of the horizon. Objects appear exactly as they do when viewed through a telescope.

The helmsman stands directly under the conning tower and steers under directions from the Captain who, when the vessel is submerged, is stationed always at the periscope. Another larger periscope with eyepiece in the operating chamber is used also to take observations because the upper one is usually pointed dead ahead although it can be swung around to any angle. Besides the helmsman, men are stationed at the diving rudders and Kingston valves which open from the ballast tanks into the sea. Other men operate the pumps. In fact, every individual in the boat has a definite task and is highly trained to do just this and nothing else.

We next enter the electrical compartment which contains the master Gyro-compass. The master compass is carefully installed in a safe place and being non-magnetic can be placed without regard to outside disturbing forces. Electrically operated relay repeaters are distributed throughout the vessel. These repeaters operate in any position and are connected to the master by a flexible armored cable which permits their being moved about if necessary. Here also is the electric stove with its grills and ovens. Food lockers and a sink fill one corner. At the rear of the compartment are the switchboards controlling the charge and discharge of the main storage battery. Underneath the floor is a second set of 60 storage cells.

We now come to the engine room containing the two immense Diesel oil engines and the two generators. The oil engines propel the vessel when operating on the surface and at the same time drive the two electric generators which charge the battery. When operating under the surface the engines are stopped and the dynamos, connected as motors, drive the vessel at a slightly reduced speed. For slow speed the storage battery banks are connected in parallel giving a potential of about 120 volts,—for full speed the banks are connected in series giving 240 volts. The battery is thus discharged evenly. When charging on the surface the battery is ventilated by means of motor driven blowers which drive the gases out into the air. When under water the battery gases are blown into the hull to prevent a dangerous explosive accumulation in one compartment. After a few hours' run underwater the air becomes quite warm, the gases which are rich in sulphuric acid, condense on the cold inner walls of the hull and start to drip. It is therefore necessary for the crew to wear both water and acid proof garments.

A trip under the surface is a thing to be remembered. When I was asked if I cared to make a trip I lost no time in dwelling on the delights or possible dangers. We started down the river in the cold gray of the morning, with a fast patrol boat just ahead of us to keep our course clear when we were running submerged. Out past the forts

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into the open sea we rushed throwing up an immense bow wave, the spray blowing back and whipping across our faces like an icy lash. Pretty soon the order was given to prepare to dive, and I entered the conning tower with the Captain. First, all railings, the wireless masts and aeriels came down, the latter being stored into the forward hatch. The crew then went below and made the hatch fast and watertight. In a similar manner all other openings were quickly closed, and after a rapid inspection and passing by the Captain we were ready to enter the domain of the codfish. Sufficient water was then taken into our ballast tanks to neutralize the buoyancy of the hull. To look out through the tiny glass ports of the conning tower and see the ocean rise and cover your decks is no pastime for a man with a weak heart. Gradually the water rises over the ports and you are in a world of green. You can see only a few feet ahead, really not more than ten. Unless in very clear water you can never see your own bow, contrary to the statements made by the men in the stories, neither do the fish come up and smile at you through the glass. When one of these underwater Leviathans enters their world the fish beat it.

The ballast tanks are divided into enough compartments to allow the balancing of the boat, because if not exactly balanced we would stand on end and sink down into the mud. I was very glad to see that they had no trouble in obtaining balance. There vessels are, in fact, so delicately balanced that the crew must keep at their stations and not move around else we would describe a very crooked course.

We submerged to about fifteen feet below the surface and then set our periscope to look dead ahead as it was still sticking out into the world above. Off to one side we could see our friend the patrol with her men peering at us with glasses. Dead ahead was the open sea. On the other side was a tug towing in a string of heavily laden barges. Overhead a gradually brightening sky smiled down on us, and all about us was the peaceful calm of the depths. The sudden change from the noisy clatter of the Diesel engines makes all other sounds seem hardly noticeable.

Giving the order to proceed ahead we continued on our course. The electric motors give little if any vibration to the hull. In reality they make no noise which can be heard outside the engine room. We slipped along through unchanging green for quite a while and then the Captain asked me if I had looked up yet. Having been trying to pierce a solid wall of water with little success I wondered what I could see by looking up rather than ahead. Such a sight! The under-surface of the water appeared as a stormy sky across which were scurrying flashing patches of brightness. This phenomena was caused by the reflection of the sun on the waves at the surface and our own speed. Looking through the periscope we saw a flock of wild ducks jump from the surface frightened by those queer looking glass eyes rushing at them, and far ahead another pair of periscopes coming towards us almost hidden in a smother of foam. I then went below and using the oscillator tried to find out who they were, but of course they would not identify themselves. However, in the course of a few minutes, I learned that there was an old Marconi Op at the key. I suppose

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that when we are finally able to reach Mars by Radio an old Marconi Op will answer us. We altered our course to clear him and then dove deep down. The Captain told me to keep a sharp lookout ahead as we were going to porpoise, whatever that might be. The next thing I knew we were rushing to the surface at an angle of about thirty-five degrees from the horizontal. Looking ahead I could see the sea become a lighter green and soon a rushing of water was heard as our tower started to emerge from the sea. Suddenly the green became white and then the sun broke into view. Immediately afterward we beheld our own bow rising up out of the water and we were again able to look around over a sparkling blue sea, but only for an instant. The bow sunk again into a creamy foam and we observed an immense white crested wave rushing back at us. Instinctively we recoil thinking that we are about to get a soaking but of course the glass keeps the water out. There is another rush and roar of water, the scene changes to the white foam of the water, and then back to a beautiful pale green, and the silence of the depths is about us once more. A ride under the river in the subway is so different! We again proceed quietly and shortly afterward come to the surface once to show the patrol where we are and to shift our course into deeper water. Our ballast tanks still being full we do not open any of the hatches.

Ordinarily, when a submersible wishes to come to the surface the water is driven from the tanks by powerful pumps. This takes a few minutes. However, the Captain desired to make a test of the emergency depth gauge. The hull is only made to withstand certain pressures and since the pressure rapidly increases as you sink deeper it is necessary to have some method of quickly bringing the boat to the surface, if the horizontal rudders should refuse to bring the boat up. They therefore carry several air flasks filled with air under terrific pressure to blow the water from the tanks. This causes the vessel to rise at once. You can set these valves to open at any depth. He set ours for a trifle less than a hundred feet and we dove down past the danger point. With a rush and a roar the water was forced from the tanks and we were literally blown out of the water in a smother of foam and spray.

After opening the hatches we started the Diesel engines and proceeded on the surface back to the base. All hands made a rush for the open air as it was getting kind of thick inside. Upon coming to the surface after a prolonged trip under the water you must be very careful. The fresh air acts as an intoxicant and you are liable to become violently seasick or dizzy or both. The decks being still wet and very slippery especially for those with rubber boots, you must be careful not to fall off the deck into the water for if you should you are almost certain to be ground to pieces by the propellers.

Arriving back at the base, we had lunch and then rested for another trip in the afternoon. On the whole I would call a submarine trip a very pleasant and educating experience, but I certainly would not like to be detailed to one of these subsea travelers very long. The excitement soon becomes commonplace and then the discomforts stand out. Men who volunteer for this branch deserve great praise because their life is full of hazards.

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The wireless sets in these boats give remarkable satisfaction when we consider the handicap of a very low and short aerial. Reception over several hundred miles is common. Transmission is dependent on the length and height of the aerial.

ADVICE TO THE LOVELORN

By Clarence Cisin

If you think you are really and truly in love—

You are not.

If you know and feel that there is only one girl for you,

There is still hope.

It is never quite too late until your sentence for life has been pronounced.

If you have any doubts, any forebodings of the future, any deep difference in ideals,

CUT IT OUT.

Somehow, Somewhere, Sometime, you will meet THE one,

Perhaps.

If you don't—Refuse all substitutes.

To pick the proper mate takes more than a philosopher.

Most people who marry are unconscious fatalists.

An unhappy married man is a common sight and causes no excitement.

A happy matrimonial voyage, having of course the usual squalls and bad weather that ends at the destined port, feeling that on the whole the trip has been a delightful one, is quite exceptional.

The exception only proves the rule.

Two landlubbers of love form a poor crew for a deep-sea voyage.

It is usually started as an excursion. It ends as most excursions do.

Even the most seasoned sailor sometimes becomes seasick because of too much rough weather; ALSO

Continually sailing on smooth seas soon becomes tiresome.

THEREFORE

To secure permanent freedom; To attain an ideal; To be happy

REMAIN SINGLE.



H2O—K⁹. Translation: Head Office Water Dogs.

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RADIO PROVIDENT CLUB DEPARTMENT

New York, Nov. 26th, 1917.

To the Members:—

It is with great pleasure the Financial Committee presents the Report of the Radio Provident Club for the fifty weeks ended November 24th, 1917.

Total number of members	140
Less number withdrawn	67
Profit sharing members	73
Number of shares held by 73 remaining members	261
Received from members during year	\$8,122.11
Less amount withdrawn by members	1,460.06
Net amount received from members	6,662.05
Add profits for year on 261 shares	349.78
Total amount to be distributed among 73 members	\$7,011.83
Value of share Nov. 26th, 1917	26.34
Amount received per share	25.00
Dividend per share	1.34 or 5.36 per cent.

(\$1.34 on each \$25.00 for an average period of six months is equivalent to slightly over 10.7 per cent per year.)

With your co-operation the Marconi Company will continue the Club for the coming year along the same lines as heretofore. Weekly payments to begin with the week ending Dec. 15th, 1917.

Those desiring to join will make their remittances weekly to the authorized collector in their department. The investment of such funds will be in the hands of the Company's Committee whose names are affixed hereto.

The following is a comparative statement of the operations of the Club for the past four years:

	1914	1915	1916	1917
Total deposits	\$4,760.66	\$5,305.50	\$7,128.50	\$8,122.11
Total withdrawals	2,032.16	2,055.50	2,403.50	1,460.06
Number of shares held by members at end of fiscal year	107	130	189	261
Amount paid in and not withdrawn during year by members	2,728.50	3,250.00	4,725.00	6,662.05
TOTAL PROFITS	104.86	143.00	177.66	349.78
Dividend per share	.98	1.10	.94	1.34
Per cent of dividends	3.92	4.4	3.76	5.36

Respectfully submitted,

M. H. PAYNE, Trustee. DAVID SARNOFF, Chairman.
 C. J. ROSS, E. B. PILLSBURY,
 C. H. WALTER, J. B. DUFFY,

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THRIFT

Isn't it immense
To think of the year gone by
How you've curtailed your expense
And you're nothing shy.
No stationery did you waste
And apparatus kept in good condition
You're cultivating a taste
For a higher ambition.
Science is a wonderful gift
Wireless tells us all
Are you thinking of thrift
While listening for a call?
Radio Provident Club you must not forget
Begins the fifteenth of December.
To keep out of debt
A deposit on pay-days always remember.

—Benjamin Beckerman

MR. NALLY'S NEW YEAR'S GREETING

At the threshold of the New Year I point with pride to our service flag in honor of the Marconi men who have joined the colors in response to the call of the president; and I earnestly hope that before another year rolls around a victorious peace may be established, and that our absent friends may be returned unharmed.

Coincident with the declaration of war, and pursuant to an arrangement previously made with the Government, the operation of our land stations passed under control of the Navy, and the Navy is gradually taking over the operation of our ship stations to the end that the Government may control radio communication for the period of the war.

This, in addition to the manufacture of radio apparatus, is our contribution to the task of winning the war. The earnest co-operative work of those of us who remain at our posts, is a vital prop to the nation.

In bidding Godspeed to our colleagues who have joined the colors, and whom we hope in due time to welcome back to our ranks, I would counsel them to put forth their utmost endeavors to serve the Government in the same loyal and efficient way in which they have always discharged their duties here, thus inviting the favorable notice of their chiefs and reflecting added credit on us.

In the New Year we must, as in the past, bend all our energies to the upholding of the Marconi ideals. I confidently count on your loyal support, and send you my hearty good wishes for you and your families.



Vice President and
General Manager

A STENOGRAPHER IN THE MAKING

By J. K. Link

In order to make a good stenographer one must be thoroughly familiar with the rudiments of the art. Experience which comes through constant practice will teach one how to apply the fundamentals with ease and rapidity. With efficiency in principles one is ready to enter upon the much revered and most essential part of stenography, namely SPEED.

It will be a slow process at first,

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but it is one which follows the law of acceleration perhaps more than anything else that I know of. The law in this case, however, needs constant policing in the form of practice. Circumstances may arise which will interrupt the steady uphill climb, but discouragement must not be known to a stenographer in the making.

The key-note of success in shorthand lies in persistent practice. Within a reasonably short time the earnest student will have the satisfaction of knowing that the law has not failed.

and stowed away, and as soon as we get the Kraut barrel filled up we can snap our fingers at the H. C. L. for the winter at least.

Keeps us fairly busy these days getting ready for inspection. We have had a half dozen inspections already and expecting another one soon. This no doubt accounts for the fact that things are in apple-pie order around here most of the time.

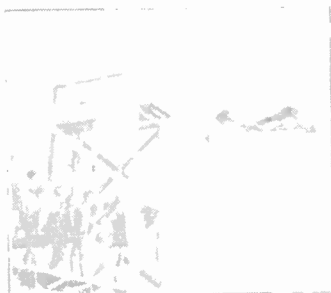
ASTORIA HIGH POWER

Our copy of the November Service News has just arrived and reminds us that the Marconi Company has not forgotten us even though we have not been heard from for some time.

We were treated to a little excitement on this circuit the latter part of September and the first of October by a ten-day cable interruption between Seattle and Sitka, the first break in over a year. Business was real good for awhile, but harring some delays on account of poor power service, owing to strike conditions prevailing here just at that time, we managed to take care of the abnormal volume of traffic over the circuit in a very creditable manner. On several of the heaviest days, the number of messages relayed ran over 300.

The new house for the Marine guard has just been completed and the boys are congratulating themselves on having a dry place to get into when old Neptune and Jupiter Pluvius get settled down to business for the winter.

We have just finished husking the pumpkins, have our spud crop all dug



N. Y. Marconi divers

MEMORIES OF WEST AFRICA

By C. Sandbach

In 1913 I was in charge of the British government 3 k.w. station at Accra, on the Gold coast, below Liberia.

Wireless often takes one into very strange fields. Have you ever heard of "The White Man's Grave?" This was the name given to the West Coast in the early days of its exploration. In those days, not more than five per cent, of the white men who ventured the exploration of the coast, returned; and those who did return were generally such wrecks as to be invalids for the rest of their lives. What made the coast such a death-bed? From all sides the white man

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was face to face with death. One can stand malaria these days, now that medical science has discovered that this dread disease is carried from one person to another through the agency of a particular species of mosquito and that regular dosing with quinine prevents the malarial germ from increasing in one's blood; but in the early days men were not aware of this. Consequently, a case of malaria generally went from bad to worse until the poor unfortunate died.

But there is another disease, carried by another species of mosquito, which is far worse than malaria. This is yellow fever. Generally the victim dies within two days.

Apart from disease, the white man on the coast is always in danger of being murdered by the natives. The writer had several experiences which were not altogether pleasant. Some, for certain reasons, I would not attempt to describe, but to show how far the nigger will go I will tell you of one incident.

There were ten officers in one mess room. Our dinner hour was 7:30 p. m. From 5 to 6 we usually played tennis. About 6:10 darkness suddenly came on and we retired to our bungalows for our evening bath and to dress for dinner. One officer's steward boy, while preparing his master's bath, remarked: "Massa! You no go chop dem fish to-night." (Master! You must not eat any fish to-night.)

"Why?" said the officer. "Massa! Dem cook, he go put something for dem fish. You go chop dem fish, you get sick for belly, you fall down, you go die."

The sum and substance of this was that the cook had a grudge against one of us and in order to kill the one he must needs poison the other nine!

At 7:30 we all sat down to dinner.

quite ignorant of the above conversation. Soup was served and enjoyed, but when the fish was brought on we were told not to touch it and were informed of its being poisoned. Of course, all the men wanted to shoot the cook at sight, I stopped them and pointed out that as there were other negroes there to bear witness, it would cause endless trouble. I suggested the cook be made to eat the fish. This was agreed to by all, but it was impossible to carry it into effect as the fish could not be forced down the cook's throat. After that, of course, there was no holding the men, and although they did not shoot the cook, he had to be carried to jail on a stretcher.

Why didn't we leave the affair to the authorities? But for the fact that the boy informant was of a different tribe from the cook, ten of us would now be beyond this world, for it was proved by analysis that the fish contained a deadly poison. Yet, this nigger got only six months in jail. This, to an African nigger, means better food and less work than if he were outside.

Life in Africa is very monotonous on the whole. One goes through the same routine almost every day. The only variation is an occasional Sunday shooting, leopard or smaller game. There are no lions or elephants within 500 miles of the West Coast.

At six o'clock in the morning the steward boy brings a cup of tea and a couple of biscuits to the bedside. At about six-fifteen you rise and take the very necessary morning bath. After dressing you lounge about until 7:30, when breakfast is served. You then repair to your respective occupations. Eleven o'clock sees you back at your bungalow drinking gin and bitters as an appetizer for lunch. Lunch 11:30, then a siesta until be-

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tween one and two; back to work until four p.m., then afternoon tea. Tennis from five to six, followed by the evening bath, then dress for dinner. Tennis, by the way, cannot be played until five o'clock. Before then the sun is so strong it would give you sun-stroke in a very few minutes. As it goes dark, the year round, at about 6:15 there is but one hour each day for recreation. Some prefer golf, others cricket, motoring, horse-riding, cycling, shooting, or, as in a good many cases, lounging around the club drinking whiskey and soda.

The hours between dinner and bedtime were generally spent playing bridge, except when at full moon the men preferred a walk in the cool, evening breeze.

A white-man's bungalow in West Africa consists of a living-room, a bedroom, and a bathroom. The rooms are very spacious and airy. The bungalow is built on concrete pillars, six feet high, to keep out the white wood ants. My bungalow was mosquito-proof, besides which I slept under a mosquito net. Although this made the rooms rather warmer, it was far preferable to being swarmed out with all manner of insects. It isn't altogether pleasant when eating soup to have a flying ant deposit its wings in your plate, or a big moth commit suicide in a like manner. This happens nightly where the bungalows are open. The insects are simply removed to the side of the plate and the course proceeds.

One night, out in the bush, four of us were at dinner when suddenly there was the most terrific yell from the boys outside. In less than half a minute a beautiful leopard peeped into the tent.—Oh, no! don't get scared! Leopards are cowards at best. The first move we made for a gun, he was off. Had there been only one of

us it would have been a different story.

Most people,—except those who have lived in snake-infested countries—are scared of snakes. I would not take a chance with a snake any more than anyone else, because if he does get one in, it is generally a home run. There are very few snakes that will not get away from a human being if they possibly can. There is one snake in Africa, however,—the Puff Adder, which is very treacherous, inasmuch as at night time he lies coiled up in the middle of the road and if you happen to tread on him—"Good Night!" One night, a friend of mine was riding a bicycle slowly home when he ran over a Puff Adder.—Whip! A little later my friend came rushing into my bungalow, white as a sheet. "Whiskey! Quick!!" The snake had made a snap at him and just caught the back of his coat, tearing a piece of the cloth clean away. I never saw a man more scared in all my life.

I could go on filling pages with little incidents of this kind. However, space will not permit. Such is life on the West Coast of Africa.

SOMETIMES

If times are hard and you feel blue,
Think of the others worrying, too;
Just because your trials are many,
Don't think the rest of us haven't any.
Life is made up of smiles and tears,
Joys and sorrows, mixed with fears;
And though to us it seems one-sided,
Trouble is pretty well divided.
If we could look into every heart,
We'd find that each one has its part,
And those who travel fortune's road
Sometimes carry the biggest load.

Some men grow under responsibilities,
Others merely swell.

MARCONI SERVICE NEWS

A PROMISING LAD

Henry C. Ching



The subject of this sketch was born of Chinese parents at Honolulu, Aug. 14, 1900. Educated in the public schools, he served with the Mutual Telephone Company for a year, and at the age of 14, joined the Marconi service in Honolulu as messenger. He at once took up the study of telegraphy, and being an apt student and an exceptional messenger, he was promoted, after two years, to be Counter clerk, becoming quickly proficient and popular with patrons. In carrying out his aim to become a Radio operator, he entered the Marconi School at San Francisco last July, and in three months obtained a first grade license, and is now ready for sea.

FIRST WOMAN ENLISTS AS NAVY ELECTRICIAN

The first woman to enlist in the Navy as an electrician has joined the colors. She is Abby Putnam Morrison and she is now an Electrician, 1st. class, in the Navy. She is a member of the wireless class for women, at Hunter's College, New York. In this photograph Miss Morrison is not wearing a navy uniform, but she is wearing the navy insignia of her rank and branch of the service on her sleeve.

Pittsburg Man (telephoning to Long Island from New York)—"Ten cents? Why, in Pittsburg we can telephone to Hades for a nickel."

Central—"But this is a long distance call."



Remember the man with a level head. He didn't get it from butting in.

MARCONI SERVICE NEWS



JAMES JEROME CURRAN, JR.

When the American steamship Moreni was sunk by a submarine off the Azores, June 12th, the junior radio officer, James J. Curran, Jr., of New York, was so seriously injured that he died in a lifeboat a few moments after being pulled out of the water. He had just completed heroic work which showed his coolness and bravery, in carrying shells for the use of the naval gunners, while the shots from the submarine were raining about the deck; then, when there was nothing else to do, he took to the lifeboat—among the last to leave.

Mr. Curran was a graduate of the Marconi school and the Moreni was his first assignment, when she sailed from New York for Spain in May. He was but 21 years old, and had previously been employed by the Commercial Cable Company, the Old

Dominion Steamship Company and Wells Fargo Express Company. His interest in wireless extended over a period of several years. He was a youth of exemplary character, a life-long member of St. Peter's Parish on Barclay street, New York, and was held in high esteem by his associates. His bereaved family has our deep sympathy.

GIRL GOES TO SEA AS RADIO OPERATOR

Baltimore has the distinction of producing the first woman wireless operator to begin duty on the sea. She is Miss Elizabeth Lansdale Du Val, daughter of Edmund Bryce Du Val.

Miss Du Val comes of an old Maryland family. One of her great-grand-fathers was Judge Gabri- Du Val, among the first justices of the Supreme Court of the United States. She started on her trip as junior operator on board the Howard, of the Merchants and Miners' Transportation Company. The vessel sailed for Savannah and Jacksonville, and during the trip Miss Du Val will be in sole charge of the wireless station from one until six o'clock every afternoon and on morning watch each night from half-past one until eight.

Mr. Spendor—"If woman was given the credit she deserves I don't think man would be quite so prominent in the world's history."

Mrs. Spendor—"I guess you are right. If she could get all the credit she wanted he'd be in the poorhouse."

MARCONI SERVICE NEWS



MARCONI BUDS

That the interest of the company in its employees extends to their families, even unto the second generation, is evidenced by Florence Mildred, the bright-eyed baby daughter of J. A. Hybarger, formerly attached to Marconi station at New Orleans, now in the Naval Reserve. She is 10 months old and tips the scales at 26 pounds. Her eyes and hair are dark brown, just the kind, so her friends say, to make havoc among young and susceptible males, 18 years hence.

We will be glad to reproduce here portraits of Marconi infants under 18 months when taken; and at the close of the year, the Editor will award a cup to the one voted to be the best baby by a committee of envious bachelors and maidens to be selected by the Editor who will act as Chairman. The year ends with April edition.



At Bellhaven, N. C., Dec. 12, Wm. T. Faber of the Draughting department, Marconi Works, Aldene, to Alice A. Clark of Bellhaven.

MR. M. C. MORRIS IMPROVING

A very cheerful letter was recently received from Mr. Morris at Denver, from which the following is quoted:

"I have almost completely remodeled; new searchlights and engine (heart) and parts of the new pumps have arrived, but until the pumps are installed complete, I am fully able to navigate mighty well for about a couple of miles a day under my own steam, something I have not done since I saw you last. Six months ago I was on my back in bed with the doctor telling me I was a sick boy and too sick to travel to Denver, but I laughed at him and told him I was thru with his advice and would leave the next day if I had to go as luggage packed in ice; and it is the best move I ever made, altho I am sorry to have hurt Doc's feelings the way I did. He tried to scare me by saying the trip would probably prove fatal. I said all right, kill or cure, that's me, I am tired of lingering. Now weigh 160 1-2 lbs., the most I ever weighed. I want to thank you and the boys, everybody has been extremely thoughtful and kind to me. I enjoy the Service News

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and Wireless Age which I receive regularly. Mrs. Morris is with me and improving in health."

NOTES FROM THE WORKS

We are glad to report the recovery of Frank Tartaglio, who was ill in the Elizabeth Hospital for three weeks, and to welcome back a pioneer in charge of the factory grounds for several years.

We also congratulate Bernard Doyle of the Drill Press Gang, 2d. shift, on his convalescence from a severe operation at St. Elizabeth Hospital, and hope soon to see him back at his machine with his smiling, cheerful front.

We are glad to learn from our obliging Editor in the N. Y. Office that the Baby contest does not close until April, as we have so many infant candidates to offer that one of our Stenogs. suggested that one whole page be given up to Factory Buds, for fear some worthy competitor be omitted.

A smoker arranged by the night shift employees at the Factory came off on Sunday evening, Dec. 9, at Progress Hall, Elizabeth, and was a great success. About 125 men were present. Members of the force presented a vaudeville program which was a scream, followed by a buffet supper and general good time. Quite a sum was realized for the band.

PERSONAL MENTION

W. W. Ward who has been for 3 years station manager at Belmar, has entered the service of the Navy as

Superintendent of Plant and Grounds at that station.

Walter E. Wood and Charles J. Weaver are stationed at Belmar station.

Arthur Smalley, Chief rigger, Russell Smalley and V. M. Higgins, assistants, at New Brunswick station, have enrolled in the Navy, and will serve there and at Belmar.

Clarence Cisin, who had a miraculous escape when the Navajo was torpedoed and later burned in mid-ocean, and who recently sailed from New York for Genoa on the Albert Watts, has again been rescued, the Watts having been attacked by two submarines and also damaged by fire. Cisin cabled of his safe arrival at Genoa. The extent of the damage to the ship was not stated.



EXECUTIVE OFFICE

Mr. Nally and Mr. Sarnoff have returned from a trip to Cleveland and Chicago.

Messrs. P. C. Ringgold, R. F. Miller, L. B. Stewart and L. E. Taufenback of the Executive office have enrolled in the Navy as Chief petty officers, and will shortly take up their new duties.

SPOKES FROM THE HUB

Constructor Gardner equipped the Southerndown (Br.) with a 1 K.W. set.

MARCONI SERVICE NEWS

Constructor Swett equipped the Rhode Island, a new Texas Oil Company ship, at Bath, Me., with a 2 K.W. 500 cycle panel set.

Operator Barbeau of the Governor Cobb transferred to the Gulfoil when the Cobb laid up.

P. W. Pratt has returned to the service and has been assigned to the North Star, which has been taken off the Boston-St. John run and is sailing from New York. Flood remains on the Star as senior.

P. S. Killam has transferred from the Malden to the City of Bangor relieving Operator Martin who went to the Malden.

The City of Athens has transferred to the New York-Savannah run and has been replaced on the Boston-Savannah run by the City of Columbus. Reilly of the Athens transferred to the Columbus at Savannah. George McEwen is senior on the Columbus.

Operator Howard of the Everett has resigned and was relieved by W. F. Norcross, who returns to the service.

The Old Colony and Ransom B. Fuller have been taken over by the Government.

R. G. Philbrook has transferred from the North Star to the City of Augusta.

EASTERN DIVISION

J. F. Flagg and H. W. Davis, both of the Southern Division, have been assigned as senior and junior respectively to the William Ison.

J. M. Bassett, formerly of the O. B. Jennings, has taken over J. A. O'Herin's duties on the Beatrice, the latter now being on leave.

W. J. Moore, a Canadian Co. operator, was dispatched by rail to Boston to join the Southern Down which is to be operated on a 50-50 basis with the M. I. M. C. Co.

C. L. Whitney, who had been suspended, was assigned to the Antilla to take the place of C. Nadler who deserted her.

The Princess Anne sailed with H. C. Busholz, who has been on the sick list, in place of W. Gold, who is at present on our waiting list.

L. J. Michaels, who has been on leave, sailed as senior, and C. Burkhardt, another new-comer, sailed as junior on the Comal in place of her former senior, V. A. Wheelless, who was transferred to the Mohawk, and junior, F. I. Drury, who has been dismissed for refusing to transfer. Wheelless sailed as junior on the Mohawk instead of B. P. Hampe, who is now on the waiting list.

H. Brudenell is still on the Golaa to which vessel he was assigned in May of this year.

R. G. Martin, who has been on the waiting list, released the Carolina's junior operator, T. J. Cerio, for Government service.

V. Zito of the Bayway has been relieved at Baltimore.

H. V. Griffing of the Pawnee, formerly known as the Harburg, is now on the unassigned list, having been succeeded by H. Newman, who has been on the waiting list, as senior on this ship. G. N. Hill, a new man, sailed as junior.

The Franklin sailed with H. C. Tucker as first and J. B. Jackson as second respectively, both having been formerly in the Southern Division.

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When the Monticello was taken over by the Navy, her senior and junior, J. W. Yaeger and H. Cunfermann, respectively, both returned to the Pacific Coast.

The same was the case when the Government took the Itasca, W. M. Griffith was senior and C. A. Riggs, junior, on this vessel.

The Clara sailed with H. L. Crandall as senior.

The Wacouta was transferred to the Eastern Division with L. V. R. Carmine as first and J. F. Parenti as second operators respectively, both being men from the Pacific Coast.

G. Street was the Pacific Coast operator on the Osage when that vessel was transferred to this Division.

A. B. Gilman, first, and W. A. Collins, second, both returned to the Pacific Coast when the Rappahannock was taken over by the Navy.

G. J. Quinn, formerly junior operator of the Ida, relieved F. H. Gardner on the J. M. Guffey, who is at present on the waiting list.

H. V. Griffing, who has been carried on the unassigned list, and G. Braito, a re-engaged man, have taken the places of R. Pierce, now on leave, and R. H. Hecht, who was released for Government service, senior and junior respectively on the Norman Bridge, a Gulf Division ship.

C. E. Onens, of the Southern Division, has replaced R. S. Scribner, who has been transferred to the Southern Division, on the Shenango.

The Gulfoil sailed with L. R. Barbeau, of the Boston Division, as junior; her senior, J. W. Allen, is on sick leave.

F. W. Payne, formerly senior on the Philadelphia (American Line), will

be the operator on the Mobila until the French Co., which is to operate the vessel on a 50-50 basis, places one of their own operators on board. The Philadelphia's junior operator, D. B. Templeton, left that vessel the same time Payne did, as Navy operators have reported on board her.

E. Dynner and D. Malisorf, first and second on the El Siglo, have been transferred to the Apache and Starlite respectively as the El Siglo has been taken over by the Government. Dynner is sailing as junior on the Apache in place of J. E. Doyle, who relieved J. Boa as junior on the Cherokee. Boa sailed as second on the Comanche with R. D. Giles as senior whom C. Stellmach relieved on the W. D. Munson. Stellmach was formerly junior on the American Liner New York. The senior operator on the New York, H. Q. Horneij, has gone on leave having stood by the ship until the Navy operators reported on board.

When the Navy operators were assigned to the Madgeburg, her senior operator, F. W. Harper, was transferred to the Owega and her junior, C. A. Schroeder, to the Oakley Curtis.

The Twilite's operator, G. H. Hamilton, sailed as junior with F. W. Harper on the Owega.

H. R. Briggs, a new man in the service, will take the Canadian Co.'s steamer, Lady Sybil, to Halifax.

J. H. Sokutis who has been on leave took W. C. Clarkin's place on the Nacoochee. The latter has resigned.

The Proteus sailed with A. H. Schweider as first and I. J. Gallo as second, both having been on the waiting list.

MARCONI SERVICE NEWS

J. E. Weber, another new man in the service, will assume L. J. Ward's duties as junior on the *Satsuma*, the latter having been dismissed for sleeping while on duty in the War Zone.

The Waiting List furnished E. Fabian for the *Cauto*.

A. H. Decker has replaced E. J. Smith as junior on the *Owasca*, formerly known as the *Allamania*, Smith having been transferred to the *Charles E. Harwood*. A new man, G. J. Gray will be the junior on the *Charles E. Harwood* for the coming half month. H. P. Perry, another new comer has taken Decker's place on the *El Capitan*, to which vessel the latter was attached before his transfer to the *Owasca*.

J. R. Conway has been taken off the *El Dia*, whose fate is unsettled, and assigned as senior with W. R. Mercer as junior to the *Zulia* in place of its former senior, C. L. Whitney (suspended indefinitely) and junior, E. E. Davis, who has resigned.

M. Schaeffer of the *Panuco* is at present ill.

When the *Nyanza* was taken over by the Navy Department, her senior, H. Markoe, was transferred to the *Panuco*, and her junior, C. L. McCarthy, was sent by rail to Montreal to join the *Saranac* which had been equipped there.

M. O. Green was assigned to the *Virginia* at Port Arthur.

The *City of Athens* sailed with F. J. Doherty and D. G. Ward as first and second respectively, both of the Boston Division.

H. T. Munroe, formerly of the Boston Division, has replaced C. R. MacDavitt, resigned, on the *Warrior*.

When the Government took over the *El Rio*, her senior, W. R. Mercer, was transferred to the *Zulia*, and her junior, R. Y. Sanford, was assigned to the *H. H. Rogers*, relieving J. B. Swift on that vessel, who was transferred to the *Clara*.

The *Tidewater* sailed with a new man as junior—E. A. Bloss.

H. E. Fulton was dismissed for not reporting for duty on the *Josiah Macy*.

P. W. Clement, a new Marconi operator, sailed as junior with E. P. Merrow, formerly of the *Benjamin Brewster*, as senior on the *Susana*. M. Kauter took Merrow's place on the *Benjamin Brewster*.

The *San Guglielmo*, an Italian Co. vessel, sailed with P. Tragni, a new operator, as junior instead of R. G. Martin, who is now on the waiting list.

SOUTHERN DIVISION

Constructor Gerson installed our standard 2 K.W. panel set equipment on the *Franklin* of the U. S. Shipping Board. He also equipped the steamers *El Capitan* and *Hercules* with 1-2 K.W. panel sets.

Harry Helgeson has joined the Naval reserve and been assigned to a submarine chaser going to the war zone.

Miss Elizabeth Duval was assigned to the *Howard* at Baltimore as junior operator on December 4th. Former Baltimore Station manager H. M. Rodchaugh is senior operator in charge. Miss Duval holds a first grade commercial license.

Dr. Curtis paid us a short visit last month. He is now on the road to full and quick recovery after his opera-

MARCONI SERVICE NEWS

tion. H. G. Hopper is acting as senior on the Kershaw during Curtis' absence.

Constructor Manley equipped the Atlantic Sun with a 1-2 K.W. cargo set at Philadelphia. L. Asadorian and C. Roethlinger were assigned as senior and junior respectively.

Constructor Sinclair equipped the William Isom with a cargo set. Johnny Flagg and H. W. Davis were assigned. They were relieved at Newport News by Naval operators.

Operator J. R. Pell has been assigned to the Borgestad at Baltimore in place of Operator Hannah who resigned.

R. G. Curry relieved H. V. Simmons on the Cubore. Simmons returns to Detroit where the wedding bells are soon to ring.

One trip on the Delaware Sun was enough for E. A. Munch. He has returned to Pittsburgh and says never again!

C. R. Hahn is acting as junior on the Sun. McQuaid is still on the job as senior.

Former operator Rosen and Toepfer of the Santa Maria have been assigned to the Persian at Philadelphia.

Walter Osterloh after a long vacation has been assigned to the Dorchester.

W. F. Vogel has been transferred to the Juniata running out of Baltimore. His place on the Nantucket has been filled by T. S. Brown, a Boston man.

J. H. Weikel has been relieved on the Santa Rita by Navy operators.

Johnny Flagg recently took a short sojourn to Savannah in the interest of the Company.

Mr. Steverink of the Belgian Com-

pany is installing a 2 K.W. panel set and 10" coil auxiliary equipment on the Folkvaard at Baltimore.

Former Superintendent M. C. Morris is now in Denver, Colorado. He informs us that he is feeling fine and well on the road to complete recovery. We all wish him the best of luck and hope he will be with us again before long.

GREAT LAKES DIVISION

The Harvester is laid up for the season. S. K. Culbertson has returned home.

The Petoskey finished her season. Operator H. M. Junker is on the unassigned list.

The Favorite, which has been towing vessels on Lake Ontario, was commandeered by the Government. Operator F. H. Weaver was relieved at Montreal and has left for his home in Richmond, Mich.

Gerald Covey, of the Lakewood, has entered the Naval Reserve as Electrician first class and is now serving in detention with Constructor E. I. Deighan, at the Naval Training Station, Great Lakes, MI. Deighan was enlisted as Chief Electrician Radio.

J. F. Born, of the Eastern States, has been transferred to the Lakeland, vice Z. A. Turner, who was called home on account of illness of his father.

The City of Erie has laid up for the season. Operator Fred Elliott was transferred to the Eastern States, which vessel has since gone out of commission. Elliott has returned to his home at Jackson, Mich., preparatory to entering the Naval Reserve.

W. H. Jones, of Ann Arbor No. 6,

MARCONI SERVICE NEWS

has been called into military service.

A. I. Refvem entered the Naval Reserve on the laying up of his vessel, the City of Cleveland III. Junior Operator C. R. Partridge has returned to his home.

R. J. Plaisted has been transferred to the Lakewood on laying up of the City of Buffalo.

H. E. Peterson has been transferred from the Carolina to the Pere Marquette. H. A. Lebkisher, a new man, relieving Peterson on the Carolina.

The M. A. Bradley laid up for the season. Operator W. E. Carlson has been transferred to the Ann Arbor No. 6.

F. L. Cady is on the unassigned list due to his ship, the Harvey H. Brown, laying up.

The Harry W. Croft arrived at Buffalo on her last trip of the season. Operator H. N. Umbarger has joined the Naval Reserve.

Lieutenant F. H. Mason, former Superintendent of this Division, was a recent visitor at the Cleveland office.

PACIFIC COAST DIVISION

H. W. Kelley relieved W. P. Giambruno as senior on the Klamath. Mr. Giambruno is now in active service for the Government.

H. G. Austin, operator and purser on the Matson Steamer Hyades, resigned from our service to take up duties with that Company as a full fledged purser on the Manoa.

W. J. Erich, formerly senior on the Maui was transferred to the position of operator and purser on the Hyades.

C. F. Trevatt and H. Cunfermann were temporarily assigned to the Maui

as senior and junior respectively.

C. F. Trevatt and H. W. Kelley, both West Coast boys, have already been across the War Zone, Trevatt making a trip to England on the War Knight and Kelley a trip to France on the Col. E. L. Drake. Both had the pleasure of witnessing torpedo action and experiencing the thrill of a missed mark. In addition, our worthy Trevatt has also experienced the pleasure of a true-mark and the incidental ducking. Both are again ready for another trip when the opportunity presents itself.

H. E. Wright and G. R. Mackin have been assigned senior and junior of the Seneca, bound East.

W. E. Grant was assigned to the Wachusett of the U. S. S. B. bound for East Coast ports.

F. Wiese, a Reservist, was recently called into active service. He was replaced by E. M. Sutton as senior on the Willamette.

H. R. Phillips and F. E. Peterson were assigned senior and junior on the U. S. S. B. Casco bound for East Coast ports.

A. Seidl and F. A. Killgore are acting senior and junior on the Matsonia bound for the East Coast.

The Wacouta of the U. S. S. B. with operators L. V. R. Carmine and J. F. Parenti is enroute East.

The Santa Inez of W. R. Grace & Company was recently re-equipped at San Francisco with a half kilowatt five hundred cycle set and the new equipments on the Steamers Sagaland, Santa Isabel, Santa Christina, Iris, Santa Alicia and Fred W. Weller are well under way.

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