

MARCONI SERVICE NEWS

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BY AND FOR MARCONI EMPLOYEES



HENRY CHADWICK

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FRONTISPIECE

If a man has a bent toward certain activities, he will follow it, notwithstanding the bait which destiny may hold out to lure him to other paths. This is the conclusion that must be drawn after a perusal of the life story of Henry Chadwick, Superintendent of the operating department in the Broad Street office of the Trans-Oceanic Division of the Marconi Company, New York. He was born in Bury, near Manchester, England, in 1884, and arrived at the age when he was old enough to attend Grammar School without giving any indication that he was to find his real future in wireless. The years rolled on and, having completed his education, he entered a business office in Bury. After a time fate took her eyes off him for a brief period and there flashed into his brain the idea that he would like to enter the field of telegraphy. Wireless at that time was not included in his plans. As the most feasible way of arriving at the end which he was desirous of reaching, Chadwick began practising on a wooden telegraph instrument which he had constructed. Thus, with his energies directed toward becoming a telegrapher, Chadwick, after two years spent in a paper mill, entered the British Post Office service, where he remained two years, leaving the service to become an employee of the Commercial Cable Company in Liverpool, and later at their cable station at Waterville, Ireland.

Wireless came directly to his attention in 1905, when he left Europe to enter the office of the cable company in New York. One of the features attracting his notice on the steamship on which he embarked was the radio equipment; and when the vessel reached American waters he had absorbed no small store of knowledge regarding the value of wireless. While he was in the employ of the Commercial Company, he began a course of study with the object of qualifying as a member of its engineering department; but wireless was still in his thoughts until he joined the forces of the Marconi Company in July, 1914.

He is known to thousands of radio men through the Marconi Victor records which he prepared in 1916, and which are in use in numerous schools and by individuals; and they are evidence that he needs no further introduction to wireless men. Not only has he taught hundreds of radio students in the Marconi Institute, but he brings with him a wealth of experience gained through 17½ years of service in the operation of cable and land line telegraph apparatus, both in America and the United Kingdom. In this line of work he has few equals.

As an official his genial personality endears him to all with whom he is associated and his readiness to oblige and co-operate makes him deservedly popular. He has an attractive home on Long Island, where, with his charming wife, he devotes his leisure hours to raising fancy chickens and cultivating quite an extensive truck garden, whence the Editor gratefully acknowledges the receipt of sundry donations of choice edibles ranging from soup to nuts.

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GOOD-BYE STATIC

Roy A. Weagant, Chief Engineer of the Marconi Wireless Telegraph Company of America, presented a technical paper describing his discovery of a new law of Nature and inventions relating to the elimination of static interferences in wireless communication before a special joint meeting of the Institute of Radio Engineers and the New York Electrical Society, March 5th. The meeting was held in the large auditorium of the Engineering Societies Building, 29 West 39th Street. Among those present were many well-known experts in the art of radio communication and others prominent in the development of electrical communication.

Mr. Weagant's paper was entitled "Reception through Strays and Interference." It was a highly scientific treatment of the subject, covering in detail methods and electrical circuits invented by him and employed by the Marconi Company at its various long distances wireless plants located in the United States.

Reviewing the conditions which prevailed in wireless communication prior to his inventions, Mr. Weagant said:

"Since the birth of wireless telegraphy serious difficulty in reception has existed, due to natural electrical disturbances. These disturbances commonly called 'Static,' 'Atmospherics' or 'Strays,' produced in the receiving telephones crackling noises which often drowned out the incoming wireless signals.

"As the distance over which wireless telegraphy was worked increased, it became necessary to use longer wave lengths. This increased the troubles resulting from static so that in the case of most important long distance circuits, such as those operating between Europe and the United States, static caused such great interruptions to the service that the continuity of communication compared unfavorably with that of cable working.

"An idea of the magnitude of the problem that existed,' he explained, 'may be gathered from the fact that during the summer months, the energy collected from static at wireless receiving stations was often more than a thousand times as great as that of a normal wireless signal received at the same station.'"

Describing the natural phenomena surrounding static disturbances, Mr. Weagant said:

"It was found that static disturbances were most severe in summer and less troublesome in winter; also that they displayed a daily variation in intensity, being at minimum between sunrise and noon and increasing very rapidly to a maximum about sunset; from then on remaining practically constant until shortly before sunrise, when the intensity fell off very sharply to a minimum again."

He noted that accumulated experience had shown these static disturbances to be more severe in locations near or in the tropics than in the temperate or frigid Zones; also that at any given location they vary from

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day to day, somewhat in accordance with the variation of temperature, being greater on warm days and less on cold days.

Mr. Weagant called attention to the vast amount of study that had been given by many leading scientists and experts to the nature and origin of these static disturbances and also referred to the innumerable attempts made to secure methods of reducing or eliminating their deadening effects at wireless receiving stations. Of his own investigations he said:

"So far as I am aware, no success of a major order was obtained with any of these attempted methods prior to my inventions and work in this field."

That portion of Mr. Weagant's paper which dealt with his discovery of a new law of Nature secured the closest attention of the scientists present. Stripped of its technical phraseology, this discovery may be described as follows:

Since the inception of the wireless art, "static" has persisted in dominating the wireless signals, forcing itself upon the radio receiving instruments with such strength that frequently the signal was completely submerged and only the static could be heard. All prior attempts to minimize the crashes of static had likewise minimized the buzz of the telegraph signal, thus producing the same net result on the human ear and offering no advance in the perfection of communication. For years, investigators in this field had considered the characteristics of the signal wave and the static wave to be the same. But, Mr. Weagant held an opposite view, believing that a difference existed between the signal and static waves. He realized that once the difference could be determined and defined, engineering methods of taking advantage of this difference could be devised. The discovery of this difference was the gigantic problem.

Unremitting study, investigation and experimenting led Weagant to the solution, which followed his discovery that static waves, instead of moving horizontally in space as do the wireless signal waves, actually move in a vertical direction, from the source either overhead or underfoot. With the determination that the static waves propagate at right angles to the direction of wireless signal waves, he had found the much-looked-for point of difference; a new electrical principle; a discovery of a new law of Nature.

The next step required devising means for taking advantage of the discovery. To overcome the static interference, Weagant invented a new type of antenna or aerial wire, for the reception of electromagnetic waves which, at one stroke, did away with the need for the huge steel masts or towers formerly used at all wireless stations. The Weagant type of antenna is placed but a few feet above the ground and consists of two rectangular loops of wire, separated, but in alignment with each other.

The static waves originating overhead and moving earthward, reach both loops simultaneously, while the signal waves, traveling horizontally from a given direction, set into vibration, first, the loop nearest the direction from which the message is coming; and then actuates the second loop. In other words, the static waves arrive at both aeriels at the same instant, while the signal waves arrive at the two aeriels at different times. This method of operation sets up in both loops static currents which are in phase or in step

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with each other, while the signal currents set up are out of phase. By a proper arrangement of electrical circuits in the receiving instruments, located between the two aerial loops, the in-phase static currents are balanced out, or cancelled; while the out-of-phase signal currents combine and remain in the circuits operating the wireless receivers which record the incoming messages.

In summary of his paper, Mr. Weagant said:

"Continued use has established beyond question that the performance of my system is not occasional or accidental but is reliable and consistent. With the new system of reception, trans-atlantic radio telegraphy can now be carried on free from interruptions caused by 'static' of any kind whatsoever, excepting only local lightning. Since the cables are also interrupted by local lightning, it follows that continuity of communication equal to that of cable operation is now possible by radio telegraphy. Wireless has the further advantages of cheapness and greater speed of operation."

Referring to the future of wireless telephone, Mr. Weagant stated:

"The great barrier in the way of practical and successful radio telephony has also been removed for 'static' has interfered with wireless telephony to a much greater extent than with radio telegraphy."

Describing the appearance of his new receiving system, Mr. Weagant said:

"It is pleasing to be able to state that arrangements have been perfected which are of such small dimensions that the entire equipment, including aerials, can be readily mounted on this lecture platform and receive radio messages from across the ocean."

COMMENT OF DAVID SARNOFF, COMMERCIAL MANAGER MARCONI WIRELESS TELEGRAPH COMPANY OF AMERICA,
ON THE PAPER "RECEPTION THROUGH STRAYS
AND INTERFERENCE," READ BY ROY A.
WEAGANT AT ENGINEERING SOCIETIES BLDG., MARCH 5, 1919

Some time ago I asked Mr. Weagant to tell me, if he could, the particular thought or idea responsible for his faith in the ultimate solution of the static problem. I asked the question specifically because of the apparent disbelief of so many others that a real solution of this vexatious problem could be obtained.

In answer to my question, Mr. Weagant stated that he had always considered Nature reasonable and logical; it followed, therefore, that it would not, on the one hand, bestow upon mankind a boon, such as electrical communication through space; and, on the other hand, place in its way a deadly barrier, such as static has been, without offering means of nullifying it and obtaining the full advantages that space communication offers to the World.

It was this implicit faith in the justice of Mother Nature which spurred Mr. Weagant on in his determination to master the disturbing elements. The task has, perhaps, helped to add a few gray hairs to his otherwise

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young head. He told you himself how he reached his goal, and I merely wish to call attention to the original inspiration and conviction characteristic of the man.

In my judgment, the elimination of static interference marks the most important practical advance in the radio art since Marconi's original invention.

International radio telegraph communication, a child of the past, will now grow rapidly to sturdy manhood.

Radio telephony over long distances and across the oceans—impracticable heretofore—is now in full view, and commercial wireless telephone service between the United States and Europe may confidently be expected.

Think what this means! Electric signaling, now more than threescore years old, has not provided means for talking to our friends across the great oceans. Whatever we had to say, others said for us by telegraph code. And, now, for the first time in the history of electrical science, the spoken word may be uttered by us in our own language and heard by the desired ears across the oceans. Gentlemen, I predict that transoceanic radio telephony will in time revolutionize international business, diplomatic and social intercourse in the same way that the Bell telephone revolutionized our daily affairs on this continent.

Mr. Weagant made reference in his paper to the possibility of conducting long distance wireless communication with less power at the transmitter than is now generally employed. This, it seems to me, should logically follow as one of the results of his great invention, and one is now justified in expecting that, before long, communication across the Atlantic may be carried on successfully with transmitters of, say roughly, fifty kilowatts, or perhaps less, and receivers of the compact type described by Mr. Weagant.

Nothing brings nations and peoples closer together than reliable, rapid and cheap communication, and wireless now promises to be the International Courier, fulfilling these three vital requirements.

The present high cable rates between widely separated countries has limited the amount of news or press matter exchanged between the United States and such countries as, for example, China, Japan and Australia. The mail service is, of course, too slow to record important events.

With the elimination of static interference and the possibility of reduced power at the transmitters, it is conceivable to me, and no doubt to many others, that two or three long distance transmitting stations, located in the most important and suitable parts of the world, could be devoted to the exclusive transmission of daily news or press matter, broadcasted to all the countries, where, with the use of the proper receiving system, the broadcast messages could be received by all and published in the press of the world.

Cable companies and the interests they represent have long made use of their favorite argument that communication by wireless is not secret, whereas by cables it is. Of course, I need not tell you practical men that no system of communication is really secret; but the very fact that several transmitting stations can simultaneously communicate with the entire world, gives to wireless an advantage that the cables never had, and never can possess.

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FOUNDERING OF THE CASTALIA

By Rolf Bergen

On the 11th of January, at 9:35 a. m., the Norwegian liner Bergensfjord picked up an S. O. S. from the S. S. Castalia (Am.), who reported herself leaking and with disabled engine and rudder. Her position was north of Sable Island and drifting east, two miles an hour. We were 170 miles away and went to her assistance at full speed. The S. S. Warfijian, 70 miles from the Castalia, was also racing towards her. The weather was very rough, with high seas and thick snow. At 4:40 p. m. Castalia reported the loss of both anchors and drifting helplessly towards Sable Island west light.

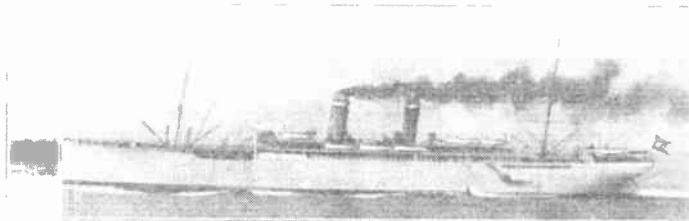
We reached the Castalia next morning at 6:35, with very high seas, snow and extreme cold. She was rolling heavily with a bad list to port, and asked us to send boats to take off her crew of forty-seven, they being too exhausted to handle boats. We put out a lifeboat, commanded by Chief Officer, but the Castalia was rolling so badly he could not approach her. We directed them to jump into the sea, so we could pick them



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up, but they declined, and our boat was recalled, smashing herself against our side, but all got safely on board.

At 3:40 p. m. the Warfijian arrived and began pumping out oil to quiet the waves. On the 13th, at 8 a. m., the Castalia launched a lifeboat with twenty-one men, but before reaching us she capsized and threw the men into the water. The Warfijian was still pumping oil, making it difficult for us to pick up the men, who could not hold on to anything, as the coating of oil made everything very slippery. Our first boat rescued two men from a barrel. Our second boat picked up eighteen men. One man was crushed between our side and the Castalia's boat. Four of those picked up died of exhaustion. The oil was a severe handicap to the men struggling in the water. It strangled them so they could not breathe. Our second and third boats rescued all who remained on the wreck and at 11:40 a. m. we resumed our eastward course, saving 42 souls out of 47. We advised the Navy Department to destroy the derelict. The Castalia was bound from Quebec for New York.



BERGENSFJORD

A FISHING STORY

It was noon by the time they reached the lake in the mountains. At five o'clock one gave up.

"I'm going," he declared. "Doubt if there are any fish in the lake. Better come along."

"No, guess I'll hang around awhile. This is a pleasant time, whether they bite or not. I've a hunch that there will be something doing before I go."

That evening, back at the village, he met his companion of the morning, and displayed a nice string of trout, the spoils of the very last hour. The other, after inspection, exclaimed, "Wish I had stayed!"

One "stuck!" He got what he wanted. The other quit and returned empty-handed. One had no patience, grew discouraged, then indifferent; but the other had faith, and loved the time, and the place, and the work.

Business is just like that. The rewards come to the man who sticks.

A short speech maketh a merry audience.

Real calm is only reached *through* the storm.

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THE U. S. S. NORTH CAROLINA'S ENCOUNTER WITH AN ENEMY SUBMARINE

On the 26th of August, 1918, while steaming in company with twelve transports about 1060 miles from the United States coast, the crew of the North Carolina was called to quarters to repel the attack of a German submarine.

Early in the day one of the transports had dropped behind on account of a minor breakdown; the North Carolina had dropped back also to stand by the disabled vessel while the group of troop vessels had proceeded on their way. It was while the North Carolina was coming up from the rear at a speed of sixteen knots, the disabled vessel having been repaired, that the gun fire from the Brazilian ship Sobral attracted the attention of all hands. The men quickly congregated on the top side, and the general spirit of all suggested that they were afraid that they would miss this encounter and arrive too late at the scene of action. They were not to be disappointed in that respect, however, as the North Carolina, putting on a burst of speed and turning to starboard on a curve, rounded the stern of the troop ships and, with black smoke pouring from the funnels, came up to protect her brood.

At about 6:15 p. m. the submarine came up on our starboard quarter and was seen by all hands; it was about five hundred yards distant and making high speed. A turn of the zig-zag threw her astern of the North Carolina and, the general alarm having been sounded, all hands waited with bated breath for the word to fire. To the spectators on deck it seemed ages before the port after six-inch belled out in defiance to the German curse. The delay, we learned later, was due to the gun not being able to bear, and the slipping of a friction gear. There was ample time to get a good look at the sub, which acted as though our back wash had thrown her out of control as she bobbed frantically up and down, evidently in an endeavor to dive.

The port after three-inch followed the six in the sharp bark of her kind with four shots. By this time the submarine had reached safety by diving into the depths. How we regretted the fact that we were without destroyers, for if we had had one of those hornets of the deep we would have added one more submarine to the navy's record. However, we were glad that the submarine had not done any damage to our troop ships. It is thought by many that this sub was either on its way from or to the States, though it might have been lying in wait for our convoy; information sometimes leaks out, and who knows?

Some of the men felt a relief when they knew the sub was left behind, others desired to turn and look for it, a highly imprudent thing to do with a fourteen thousand ton cruiser and twelve troop ships.

Before the North Carolina came up to the attack, the sub had fired a torpedo at the DeKalb, which was steaming ahead of the Sobral. The Sobral opened with two guns, and the sub disappeared, leaving an oil slick on the water. Some reported that they saw two periscopes; the DeKalb

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verified a suspicious movement in the water astern which might have been a torpedo or a periscope

Needless to say, the crew of the N. C. were on their toes for the rest of that trip, and upon the return trip alone all hands prayed that they might meet up with the same sub and pay him off in T' N T before he reached Germany. The only thing we sighted on the return trip was a large can buoy which floated high out of the water and which we opened fire on about dusk one evening, the three-inch shells bouncing off it like a rubber ball off a brick wall. After having a little target practice of this order we proceeded on our way, all anxious to get in and to get ashore in little old New York, where we could enjoy a few hours ashore before taking another fifty thousand over there.—*The Convoy.*

A BREEZE FROM BUENOS AIRES

A curious mixture of old world customs and new world methods I find in Argentina. This is clearly exemplified in the architecture of the city of Buenos Aires. Side by side stand the strikingly plain Spanish buildings with their massive porticos arched over the walks and beautiful buildings of light and sprightly architecture borrowed from the French. The Argentine has been quick to adapt to its own peculiar needs the best of both schools of architecture and blend them into a harmonious unit suited to the local conditions. Many of the dwellings are real gems and stir up a desire to pry into the intimacy of the interiors, for the man who can build him a home of poetry on the outside must show an equal facility in decorating his rooms. The basis of residence construction is Spanish with all the rooms built around a central court, often containing a fountain and rare statuary and set off by a riot of color from tropical and semi-tropical plants. From the French come the ornamental touches that make these homes so artistic. The avenues and parks are to me a wonder and delight, and their monuments and statues attest the skill of the famous sculptors who have given so much to make this city attractive. If anything, they are too perfect, too exact and symmetrical, and time is needed to mellow the perfect lines and to age the trees and give them an individuality.

In a similar manner the character of the Argentinian is a blend of older world ideals. He is excitable and spontaneous, also romantic, but he is very human. Now on this Latin stem is being grafted the business methods and principles of England and the United States, and everywhere these influences are apparent. The country is young and evidences the traits of a growing boy with his bubbling enthusiasm and optimism; but it has a potential strength of commercial power that is bound to play an important part in world affairs.

This is in brief the country that the Pan-American Wireless Telegraph and Telephone Co. is about to bring into close commercial relations with the United States by the construction of the high power stations near New York and at Buenos Aires. 5,300 miles of space annihilated in the near future! It is a pleasant prospect to think about. We have been slow to realize the greatness of the growing countries to the south of us. In what-

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ever direction I turn American products are to be seen; windmills, engines, toilet articles, automobiles and in fact so many products from the States everywhere that when one considers the very limited means of communication and transit one marvels at the strides we have made in trade with this new country. With our increased merchant marine and the fast growing popularity of American-made goods, a reliable direct radio service will add the factor that will clinch our hold on this valuable foreign market.

I. C. E.

ELIMINATE WASTE
LOOK TO THE LITTLE THINGS
IN EVERY POSSIBLE WAY
MAKE EVERYTHING COUNT
INFINITE SAVINGS WILL FOLLOW
NEVER WAS IT SO NECESSARY
AND THE NECESSITY GROWS
THIS IS THE DUTY OF ALL—THAT
EVERY MAN IN HIS LINE SHALL
WASTE NOTHING
ALLOW NOTHING TO BE WASTED
SEEK TO CONSERVE
THIS IS YOUR DUTY AND MINE
ELIMINATE WASTE

HIS DOG

(He also Serves Who Only Wags and Waits.)
I'm sure I sniff excitement in the air—
Perhaps he's coming home! If I could know!
But up and down the street and everywhere
I've watched about a hundred years or so;
Yet somehow I expect him any day—
With cheers and shouts, as when he marched away.

And when I hear that whistle, and you see
A streak of dog, in frenzied happiness,
You'll understand! He'll pat my head and say:
"Hello, old pal! You missed me some, I guess!"
I leap to kiss his hand, and then—oh, boy!—
I wonder if a dog can die of joy!

The early settler is the man for whose trade the shopkeepers vie.

The trouble is that we so seldom do tomorrow the things we put off to it from today.

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THE MERCHANT MARINE

An enormous increase in the number of Americans who will turn to seafaring life as a result of their experiences in war service is predicted by the *Sailors' Magazine*. Dr. George Sidney Webster, secretary of the society and editor of the magazine, predicts that experiences of the war so unexpectedly thrust upon our American youth, will stimulate a new and heretofore undeveloped love of the sea.

Dr. Webster says that last year as thousands of Americans had their first opportunity of going to sea, that perhaps many of them will feel the lure of seafaring life; and that since more ships than ever are flying the American flag, sailors and soldiers of the American Expeditionary Force will turn to the mercantile marine for their life work.

Says Dr. Webster: "Never has there been such an opportunity for engaging in an occupation that will bring credit to our flag and help to put this nation in the high place she ought to occupy among the maritime nations. Will not many of our soldiers from overseas, when they return, engage in a seafaring career? Will not many who went into the United States Navy turn to the mercantile marine for their life work? Out of these experiences so unexpectedly thrust upon our American youth there ought to come a great revival of American seamen."

It usually requires much greater strength of will to do the little things than the big ones.

OBITUARY

With regret we chronicle the death of Samuel Charles Hymel, at New Orleans, March 6th, due to a complication of disorders, aged 28 years. He entered Marconi service in September, 1916, and was one of our best and most reliable ship operators. We extend deep sympathy to his family.

NOTES FROM THE WORKS

MARCONI EFFICIENCY CLUB

About a year ago twenty-two men of the Marconi Works formed a class to pursue the study of the Emerson Course in Personal Efficiency under the able guidance of Mr. Griswold at the Plainfield Y. M. C. A. It is indeed interesting to know that of these twenty-two men, twenty are still in the employ of the Marconi Company and help largely to form the nucleus of that efficient organization.

Acting upon a suggestion, the committee of affairs, consisting of Messrs.

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Langley, Steiner and Kachelreiss, made elaborate arrangements for a banquet, which was held at the Elks Club, Elizabeth, February 20th. It was a fitting and successful termination, marking the first anniversary of the Marconi Efficiency Club. After the first principles of personal efficiency (of being on time) had been somewhat abused by tardiness it was found upon counting noses that thirty-eight men had assembled, consisting of members and their invited guests, and all were ready, judging from their facial expressions of hunger, to partake of the bountiful feast provided.

On entering the dining room it was found that the tables were arranged in U shape and bountifully laden. To the right of the head table were seated departmental heads and office men; to the left, shop men and foremen. At the head table were seated the officials of the Marconi Works and a real honest-to-goodness toastmaster, Mr. Langley, who admirably handled the affair and injected pep into those assembled. We had no sooner become comfortably seated than the strains of the Star-Spangled Banner were heard and immediately this 100 per cent American assemblage arose and sang with a real spirit their beloved national anthem. The only regret of the evening was experienced when it was noted that Messrs. Benson, Tingley, Kachelreiss, Godley, Walters and Graham had not been able to make proper excuses to their wives in order to be with us. Of course, one who is hungry can imagine what happened to the various delicacies which were served. For a while quiet reigned, only to be disturbed as the inner man gradually filled up, when local jokes and happenings at the tables assumed the proportions of real humor and general fun making. Someone desired to know whether the bone-dry movement had anything to do with the omission of the oyster cocktail which had been scheduled on the menu. He was immediately taken to the anteroom and explanations made that an oyster cocktail was not a drink. Still another event happened when one gentleman suggested slipping a piece of cheese into Mr. Collins' pocket. Even though this did not happen, Mr. Bosler went into hysterics at the possibility of such a thing. After a session of spasmodic laughter he resumed his meal, but somewhat weakened from his experience.

It was after consuming the dinner that the expression of "sufficient" was used more than "efficient." Mr. Langley rose to take charge of affairs and delivered an eloquent address, giving a synopsis of the happenings of the efficiency class from its inception. He then passed for examination a German helmet and gas mask, the latter being suggested as useful when eating over-ripe cheese. Speech making was then in order and, as each one was called upon, the time-worn excuse that "I am not a speaker" was usually the beginning and ending of the addresses. Still it must be said that the Hon. Chauncey M. Depew had many contestants for his position as the country's illustrious speechmaker, and he was near losing his title when Mr. Collins eloquently expounded the thoughts which crowded his cranium.

Mr. Stein gave encouragement in regard to the future of wireless and the Marconi Company, and thanked the members for their co-operation in contributing to the success of the company. Mr. Farrand's suggestion that a permanent organization be formed to promote good fellowship intermingled with discussion of shop work, meeting periodically, was received with

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enthusiasm. Mr. Langley was named as honorary chairman to the committee which would be formed to formulate plans to carry out his suggestion, the fire of which had been kindled in the minds of those present. Mr. Elen-schneider gave an excellent speech, relating his experiences when the Marconi Factory consisted of only three men, who performed all the duties now carried on by the various departments of the office and factory.

Aside from the stories told by Mr. Lemon and Mr. Edwards, efficiency was the keynote of the discourse. After a final address from the chef, in which his plea reached the hearts of the committee, they forthwith presented him with a check covering the cost of the festivities. When three man-sized cheers had been given Mr. Stein, all departed for their homes, and, after an extended period of restless tossing in their beds, fell asleep, and, we hope, dreamed of the great future of the Marconi Company and its employees.

OUR BOWLING TEAM

We have a bowling team of which we are justly proud. It has been organized for but one season, but thanks to the able management of its organizer, Mr. J. W. Whitam, whose photograph is presented here, it has already taken third prize in the Union County Manufacturers' Bowling League and we look for even better success next season. Our team was the newest member in the league, which has been in existence for some years.

The league awards were as follows:

First prize—Bethlehem Shipbuilding Co.

Second prize—Diehl Motor Co.

Third prize—Marconi Wireless Tele-graph Co.

Among themselves the members of the team competed for two handsome gold watch fobs. The first prize was won by Mr. Chas. LaPoint for highest average during the season, 170.5 points. The second prize was awarded to Mr. Whitam for the highest score in a single game, 237 points.



Scores for Manufacturing League contest:

	Games	Average	High Score
H. Decker	45	165.21	212
G. Bush	45	163.37	196
J. Craig	32	160.12	227
C. LaPoint	39	172.4	224
T. O'Donnell	42	168.19	220
J. W. Whitam.....	22	155.8	237

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POP FRAUENTHAL

On March 7th Mr. A. W. Frauenthal, who is familiarly known as Pop, celebrated his 75th birthday. Pop was born in Rouen, Normandy, within a stone's throw of where Joan d'Arc, the maid of Orleans, was burned. He came to New York at the age of eight. One of his schoolmates was the brother of the late Cardinal Farley. He started his business career selling newspapers after school. At the age of twelve he moved to Bridgeport, Conn. One of his playmates in Bridgeport was the daughter of P. T. Barnum. Shortly after moving to Bridgeport, Pop decided to give up school for good, and became a trainboy on the New Haven Railroad. In this capacity he met Prof. Anderson, the wizard of the north, and managed to



secure an engagement as an assistant to Prof. Anderson, with whom he traveled a short while, acquiring a knowledge of magic. This engagement, however, was terminated when they were stranded in St. John, New Brunswick. This did not seriously embarrass Mr. Frauenthal, for he very soon obtained a position as trainboy on the European and North American Railway. After about a year he returned to Bridgeport and went back to his old job of selling papers, candy, etc., on the New Haven Road. On the train on which he traveled Mr. Barnum was a regular commuter, and one day offered to make Pop a magician. The offer was gladly accepted and Pop made his bow to the public in the old Barnum Museum at Broadway and Ann St., New York, where now stands the St. Paul Building, under a gaudy sign as Alexandre, the famous boy magician of Europe.

After completing one year's engagement with Mr. Barnum, he left to accept a position in Booth's Theatre, and for forty years followed the show business in various capacities, such as supernumerary, program boy, usher, doorman and business manager for road shows. He traveled to all the principal cities from Boston to Kansas City. He knew by sight and personally many of the famous men living during the sixties and seventies. Among those whom he knew to speak to were Augustin Daly, Edwin Booth, Tony Pastor and Harrigan Hart of stage fame. Among other people whom he met were Cyrus W. Field of Trans-Atlantic Cable fame, James Gordon Bennett, of newspaper and racetrack fame; Mr. Gilbert, builder of elevated railroads in New York; Francis Train, Robert Bonner, Col. James Fisk, J. Pierpont Morgan and J. Gould. After leaving the show business Mr. Frauenthal for a short while became interested in aquatic and turf sports and claims to be the originator of the color score card which graphically shows the position of contestants during the progress of races.

During the past 25 years he has turned his hand to many odd jobs, having been a salesman for various novelties and latterly has been confining himself to a job as watchman. We have told before in this magazine of his challenge to Mr. Marconi and Mr. Weagant, and he established at that time pretty well the fact that no one passes his entrance to the factory unless they have gilt-edged reference as to who they are. Pop is the father of four children and he has eight grandchildren and ten great-grandchildren.

MARCONI SERVICE NEWS

ENGINEERING DEPARTMENT AT THE WORKS

Mr. Harold Ryder, of Roselle Park, who was a prominent member of the File Room Staff, has returned to the Marconi Family, after a few months absence in the Naval Service. Mr. Ryder is now in the Engineering Ranks as a Junior Engineer.

Almost the entire Engineering Staff attended the joint meeting of the Institute of Radio Engineers and the New York Electrical Society at the Engineering Societies Building in New York recently. Mr. Weagant's paper on his important invention was not to be missed, ferries or no ferries.

Mr. O. R. Aberg, who has been a member of the Drafting Room Outfit since March 7, 1917, suddenly decided to accept the offer of another company, and has left our employ. Good luck, Oswald!

One highly desirable result of the log-jam in the Senate has been the squeezing to death of the agricultural appropriation bill, containing the daylight saving repeal rider. Daylight saving has proved its lasting value, and makes for economy, health and wholesome recreation.

SHOP NOTES

When it comes to straightening out tool stock rooms you have to hand it to Pat. Collins.

Talk about reconstruction, have you visited the Tuner Department, lately?

Speaking of get-together meetings, what is the matter with the Marconi Fire Department?

The Marconi Family has nothing on the Wood Family:

Billy—My uncle's got a wooden leg.

Jimmy—That's nothing, my sister's got a cedar chest.

•We are always glad when Friday comes around. Why? *Beans.*

Mr. D. Leonard, foreman of the 5 KW. Dept. is back on the job again after a brief illness.

After being sick with the "flu," our good old friend, Mike Ratchford, will soon be with us again. A speedy recovery, Mike.

One of the special features of the last band rehearsal was the saxophone solo played by Mr. James Emery.

The jazz band is coming right along and if you have not already heard them, don't miss the next opportunity. They play at the New York Hippodrome on Sunday evening, Feb. 30, 1920.

The drawing for a tool kit belonging to our late shop-mate, Mr. Frank Schmidt, for the benefit of his orphan, was held on Saturday evening, March 1st, at Liberty Hall, Elizabeth, N. J., and the winner was Mr. James Fraser of the tool department.

Our congratulations to Mr. George Whiting of the Assembly Department upon his 10-pound baby girl.

The Marconi Efficiency Club permanent organization is coming along apace. Plans now are to have dinners at the shop, prepared by our own caterer, and cooked in our own kitchen. The first of these is scheduled for the latter part of April. Better start preparing your speech now.

MARCONI SERVICE NEWS

FLANDERS, 1916

Wee scamperin', irritatin' scunner
Hoo dare ye worry me, I wonner,
As if I hadna lots tae dae,
Blockin' the road tae auld Calais
without ye.

Ye'll hardly let me hae a doze
For ye're paradin' richt across
Ma back, ma neck, an' doon ma spine,
Thinkin', nae doot, ye're daein' fine,
Sookin' ma bluid.

When at my country's ca' I came,
Tae fecht for Beauty, King and Hame,
I read ma Yellow Form twice,
But it said naught about fechin' lice,
Or I hae gibbered.

When "Little Willies" skif ma heid
An' me aboot tae "draw a bead"
I fain wad stop tae scart ma back,
Tae shift ye aff the bitten track,
Afore I fire.

When thro' the shirt o' Sister Sue,
I search maist carefully for you,
I smile tae think the busy wench,
Ne'er dreams her seams mak sic a trench,
Tae gie ye cover.

What labyrinthine dugoots too,
Ye're makin' in oor kilts the noo'
Your reinforcements tak' the bun,
Encouraged by the Flanders sun,
Tae keep us lively.

Goot strafe ye, little kittlin' beast,
Ye maybe think ye'll mak a feast
O' me; but, no, ye'll get a "had,"
When next ye try tae promenade
Across ma kist.

The mixture in the bottle here
Is bound tae mak' ye disappear,
Nae mair I'll need tae mak ye click
Ae dose, they say, will dae the trick,
As shair as death.

WHY NOT?

If a female duke is a duchess
Would a female spook be a spuchess?
And if a male goose is a gander
Then would a male moose be a
mander?

If water you freeze is frozen,
Is the maiden you squeeze, then,
squozen?
If a thing you break is broken,
Would a thing you take be token?

If the plural of child is children,
Would the plural of wild be wildren?
If a number of cows are cattle,
Would a number of bows be battle?

If a man who makes plays is a play-
wright,
Would a man who makes hay be a
haywright?

If a person who fails is a failure,
Would a person who quails be a quail-
ure?

If the apple you bite is bitten,
Would the battle you fight be bitten?
And if a young cat is a kitten,
Then would a young rat be a ritten?

If a person who spends is a spendthrift,
Would a person who lends be a lend-
thrift?

If drinking too much make a drunkard,
Would thinking too much make a
thunkard?

But why pile on the confusion?
Still, I'd like to ask in conclusion
If a chap from New York's a New
Yorker,
Would a fellow from Cork be a
Corker?

MARCONI SERVICE NEWS

NOTICE

Attention is called to the requirement that officers and employees of the company must not write for publication, or allow themselves to be quoted, regarding the company's affairs. No information will be given out excepting as to opening of new services, instances of specially meritorious service, etc., when such publication may benefit the company. Unnecessary discussion should be avoided, as liable to result in affecting the company's interests unfavorably.

ROLL OF HONOR

The roll of honor, carrying 449 names, which is now complete, will no longer be carried in these pages. A supply of cards carrying the names, suitable for framing, is being printed and will be sent to Superintendents for free distribution to those enrolled.

PERSONAL

G. E. Henderson has been relieved from duty as Superintendent of the Gulf Division, and Paul C. Ringgold is now Acting Superintendent.

William H. Barsby, Chief Electrician, (Radio), has been released from the Navy, and resumed his former position in the high power service at N. Y.

Lee Manley, District Manager at Philadelphia, and Fred Schwab, his assistant, also W. P. Grantlin of the Construction department at Baltimore, have recovered from the flu.

EXECUTIVE OFFICE

Mr. E. J. Nally, Vice-President and General Manager, returned from Europe March 8th, on the Nieuw Amsterdam.

A few days later he entertained the Head office staff, to the number of 80, at a buffet luncheon in the general office, and gave a most interesting talk lasting an hour, covering conditions as he saw them in England, France and Belgium. Mr. Nally is a keen observer and deep thinker, and his first-hand observations were much enjoyed by those present.

Mr. W. H. Howard, of the Engineering Department, is en route to Manila, on business of the company.

Commander Richmond, R. N. V. R., representing the English Marconi Company, passed through New York recently en route to Peking, to supervise the erection of high power stations for the Chinese government.

A complimentary dinner was given to Mr. Nally by 26 members of the staff on his return from Europe. The dinner, which was served at the Fifth Avenue Restaurant, was a most enjoyable function, enlivened by a number of speeches, the principal one being by Mr. Nally, detailing his unusual experiences due to strike and war conditions, and vividly describing what he saw of the devastated districts.

Mr. R. A. Weagant, Chief Engineer, has returned from a business trip to Washington.

The Auditing Department reports the following resignations: Mrs. T. Boyd and the Misses G. Reynolds, A. M. Bassett and M. R. Ewing.

Messrs. Pillsbury and Winterbottom recently visited the high power stations at Belmar, N. J., and Chatham, Mass., which have been released by the Navy.

Mr. Winterbottom has returned from a business trip to Ohio.

EASTERN DIVISION

NEW YORK

The unusual activity which has been

MARCONI SERVICE NEWS

noted around the Broad Street office during the past month was greatly increased upon the arrival last week of Mr. Barsby of the high power system, and an assistant, who are making energetic preparations for the re-opening of the trans-Atlantic service.

When the tug Neptune caught fire at a dock in New Bedford about four a. m. recently, the first thought of Operator H. D. Taylor was to save the wireless apparatus, even before his own personal effects. The tuner, telephones, and several other parts which were easily detached, he removed first, and then with the assistance of a deck-hand carried the heavy tool box out onto the deck, thus saving some valuable new parts as well as the set of tools. The smoke and fire became unbearable, preventing his further efforts, otherwise he would have had the entire wireless apparatus on the dock. With a great effort he then managed to rescue from the flames, smoke and water, some of his more valued personal effects.

The burning of the Neptune leaving Taylor without an assignment he was shipped on the Craster Hall as junior to P. H. Nisley and is now on the way to South America.

Operators running in and out of New York are impressed with the efficient and expedient manner in which "AV" at the various NAH stations (all worked from the same office by remote control) handles their traffic. Many who have been passing compliments about him are not aware that he is no other than A. E. Voitlander, an old Marconi operator, who is using the good experience he gained while in our midst to the great advantage of the Navy. How he manages to clean up three and four hundred messages from the incoming Leviathan, then take others from some other big troop-ships and find time to take

care of the coast ships, as he efficiently does, is a source of wonder even to the older men. Voitlander, by the way, is a candidate for an important post in the Marconi high power work when the time comes for him to remove his sailor clothes.

Speaking of congratulations due Navy men, the news that W. J. Roche, a former well-known Marconi operator, has recently received a commission as Ensign, having been promoted from Chief Electrician, will be received with interest and call forth numerous congratulations from the Marconi ranks. Ensign Roche plans to rejoin the Marconi service after his release.

A. E. Kierstead has arrived direct from the front line trenches. He showed us several souvenirs, which proved highly interesting but none more so than his discharge from a base hospital which tells that he was operated on for gun-shot wound from shrapnel received while advancing at Chateau Thierry. The operation was successful and Sergeant Kierstead says that while the wound was in a bad place on the leg it does not bother him. He has grown stouter and shows evidence of the life having agreed with him. Among his souvenirs is a belt he is wearing which he took from a German.

Arthur Lynch also dropped in to tell us of his experiences in France and, incidentally, to see about his return to the Marconi ranks.

Among the ex-army men to come back to wireless during the past month are: Ralph Venegas, who sailed on the Socony 89; Carl Orloff, who went out on a long voyage on the Dawnlite; Stephen Hopko, who is now on the Socony 84; G. O. Pedersen, who was assigned to the Gold Shell; H. K. Beyer, who was sent to Philadelphia to take out the Agwi Star, and Jacob Davis, who went on the F. R. Kellogg.

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Several Naval men also were assigned from this office: H. J. Decker to the Borequin; F. W. Payne to the Topila; F. L. Velten to the William O'Brien; F. B. Llewellyn as junior to A. Crutenden on the Santa Luisa in place of R. G. Martin who went on the City of Montgomery, and F. E. Engelder, who after making one short trip on the Socony 89 asked to be placed back on the waiting list.

T. J. Welch left on the Argonne for a ten months' trip around Africa.

C. L. Jones and C. J. Quinn asked to be relieved from the Maracaibo and J. M. Harrison and Marc De Luca were assigned in their places.

C. W. Vollmer re-entered the service and is now on his way to China and the Orient on the British steamer Tjitaroem. Some luck for Vollmer!

A. S. Cresse is again on a trans-Atlantic run having sailed on the Millinocket for Belgium within a week after returning from Holland on another ship.

R. H. Redlin, who has been on the sick list, sailed on the Vesta.

Jack Kramer, who became popular around the office while awaiting his first assignment, sailed with T. J. Cerio on the Medina for Greece. He is a graduate of the Marconi Institute.

Two other Institute graduates were put on last month: T. E. Simonton went on the Standard Oil Company's El Capitan with D. C. Smith, and Philip Petlicki made several trips on Old Dominion steamers.

BOSTON

K. E. Smith has been assigned to the Matoa, relieving R. W. Rice.

The first of the Eastern steamers, the North Land, is in commission on the Boston-Yarmouth run with operators Swett and Barber on duty.

Frank Flood was a recent visitor to

the office and is going third mate on one of the Shipping Board ships in overseas service.

Operator J. N. Smith has gone overseas in the Arlington with an interesting cargo of steel and inflammables. The Brandon, operator Swift, also sailed with a similar cargo. We wish Smith and Swift safe voyages.

Judging from the number of naval ops applying for assignments it would appear commercial wireless is more attractive than radio in the navy and the difficulty will be in locating berths in the merchant marine for these men if more ships are not released to private operation.

Operators Travis and Martin of the Governor Dingley, recently left Boston for Norfolk, tearfully.

SOUTHERN DIVISION

We equipped the F. Q. Barstow with a half kw panel and 10" coil auxiliary. Assigned W. F. Vogel as senior and Charles Hahn as junior.

The Munrio was turned back to her owners and we placed H. M. Rodebaugh on her for a trip to France.

The Munplace was turned back and Hubbard McCauley, just out of the army, was assigned to her.

The Munwood was released by the Government here and Edward McCauley, just out of the Navy, took her out. (Hubbard and Edward are brothers.)

We are receiving quite a number of applications from boys just out of the service, who think they will take up wireless. We hope to be able to accommodate them in a few weeks.

Since Loyal McKee, a former Southern Division man, took unto himself a wife, he hasn't been around to see us. Guess he isn't boss anymore. He can't say we didn't warn him. Ask Pope.

MARCONI SERVICE NEWS

The many friends of our former Supt. M. C. Morris will no doubt be pleased to know that Mrs. Morris and baby have recovered from the flu and that he is recovering from a recent sick spell. The Southern Division wishes him and his family a speedy recovery.

GULF DIVISION

Many of the old timers are returning to our service on account of the generous increase in wages.

J. E. Broussard, the Gulf Division Travelling Inspector, succeeds P. J. Barkley in the Key West District.

R. G. Curry, formerly of the Tug Freeport Sulphur No. 2, has been released from the Hospital where he has been confined for the past two weeks. Y. de Bellefeuille succeeds him on the Freeport Sulphur No. 2.

L. B. Grissom has been relieved as junior on the Marina by E. Krause from the Eastern Division.

C. D. Sweeney, formerly of the San Ramon, is in charge on the William Green.

H. E. Blasier, formerly of the Key West District, is at present on the Jalisco (Mex.), running between New Orleans and Mexican ports.

D. W. Jolls remains on the Tug Buccaneer.

T. J. Alderman and L. H. Boizelle are senior and junior respectively on the Coahuila.

J. H. Jensen remains on the Gulfport.

H. Ely is radio operator and purser on the H. M. Flagler.

H. L. Crandall is in charge on the Marina.

C. F. Bailey is still navigating the waters of the Gulf on the Pan-American.

A. P. West, formerly of the Tormenter, which is laid up, has been assigned to the Roy Hooper.

W. H. Stimers is working a combination job on the R. P. Clark.

O. C. Kebbale remains on the Senator Bailey.

William Macke and G. W. Shuman are senior and junior respectively on the Tegucigalpa.

C. P. Bernard is senior on the Yoro.

Operator Flagg, an old standby of the Southern Division, was a recent visitor at the office, having just returned from Genoa, Italy, as passenger. We understand he drew \$480.00 on his arrival here but fail to find his name in the newspapers. Operator Yuhl also returned from the same port on the same vessel as a passenger.

The San Antonio (Mex.), which arrived in Mobile the middle of March, for extensive repairs, will be equipped with a 1.7 kw Canadian cabinet set before her departure for Tuxpan.

The Tegucigalpa is being equipped with a new 2 kw panel set, which has been purchased by the Vaccaro Brothers.

GREAT LAKES DIVISION

CLEVELAND

With the approach of April and spring weather, we are found, as usual, down on the docks rubbing elbows with the mates and engineers of the Great Lakes vessels. Every one is busy putting the great fleet of ships in commission for the season or 1919. Our job is no small one, for every vessel has its aerial to be erected; the set to be overhauled and returned, and with seventy odd vessels in seventy odd ports our constructors' jobs is not all roses. Then, too, we have always to figure on some new installations. Work has been started in dismantling the K. & C. apparatus from the five vessels of the Detroit & Cleveland Nav. Co. and re-equipping them with Marconi $\frac{1}{2}$ K. W. panels. The new wrecking tug Favorite, is also being equipped with a $\frac{1}{2}$ K. W. panel set. It is expected that work will

MARCONI SERVICE NEWS

be started on several other new installations before the close of the month.

Wm. H. Jones of Great Lakes fame, who has been serving on the car-ferry Ashtabula since his discharge from the army, has joined our construction force and is now busy equipping the Detroit & Cleveland Nav. Co. vessels; the car-ferry Ashtabula having laid up.

CHICAGO

W. J. Ferris, one of the operators of the car-ferry fleet, writes us that there has been little or no excitement throughout the winter to break the monotony. Usually the men among the different vessels have tales to tell about some perfectly good trip being spoiled by getting stuck in the ice or forced aground. But instead they hear our feathery friends of summer, and claim that they hardly noticed the supposed winter.

R. W. Eling is now occupying the berth of former operator T. Tighe, of the Ann Arbor No. 4.

The two passenger steamers which ran all winter out of this port have E. Prenzel on the Indiana and L. Schermerhorn on the Alabama. Both operators are waiting for the big ones to start. It seems that the fellows on the freighters cannot become reconciled to the glittering fixtures of the palaces that sail our inland seas.

PACIFIC DIVISION

E. D. M. Fabian joined the Wapama as senior, replacing H. E. Wright on leave of absence.

E. R. Fairley, in charge of the Steamers Hermosa and Cabrillo, believes a change of ships helps to break the monotony and boost up the spirits. He is not losing any time as the limit is drawing near. When he gets tired of one ship, he changes ships. At the present he is on the Cabrillo with the Hermosa tied to the post.

Operator A. S. Cresse, formerly of this division, was relieved as operator-in-charge of the Norwegian Steamer Dicto at New York. The Dicto, now carrying a Norwegian operator, is being operated by the Affiliated Company.

The Nanking of the China Mail Steamship Company, was recently equipped with a standard Marconi 2 kw 500 cycle panel set. Edmund F. Smith is in charge with C. D. Hill acting as junior.

A card was received recently from R. V. Harris, familiarly known as Reggie Harris, an old time Marconi man, who is now in Germany with the Army of Occupation. Mr. Harris is more than anxious to return to Seattle as there is a seven months' old baby boy waiting for his first meeting with his daddy.

G. C. Hallett has received his discharge from the Navy and arrived in Seattle. For the past nine months he has been on the Russian ship Toola. During one of his trips across, he met Gus Lange and Loren Lovejoy, both former Marconi operators.

Edwin Kraft, who was in this division for a short while, is now stationed on the U. S. S. George Washington, a shipmate of the President's. Don't be envious. He was one of us, so we come in for some of the glory.

J. E. Johnson, who was stationed at the Ketchikan station for some time and later assigned to the Seattle station, is the proud father of a fine baby girl. The little lady has been named Rilla Jean.

Old John Barleycorn is dying. The boys are coming back; business is picking up. Prospects are looking brighter. Why not keep up with the times? Look brighter, show more pep and boost our interests. The Marconi interests are ours. The more we boost, the better the harmony, the happier the family and the greater the success to us. Now's the time; get busy.

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