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Bacher, H. Baidwin, Edward F. Baldwin, Edward F. Barbaiette, Aaron, Barbaiette, Aaron, Bareby, Wm, H. Batcheider, Isaac H. Batcheider, Isaac H. Batcheider, Isaac H. Batche, George E. Baxter, Chester L. Beane, Edwin A.	New Jersey California Ohio New York New York Pennaylvania California California California New Jersey Massachusetts New York New York New York New York New York California California California California California New York H. Penns. California H. Michigan W. N. H'shire Jr. Iowa New York New York New York New York New York Florida Marylad California
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Bucknam, John R.	New York
Burgers Gao H	New York
Burgess, Geo. H. Burhap, Harold J. Burns, Walter I.	
Burnap, riarold J.	Wisconsin
Burns, Walter I.	California
Butterfald C W	Massachusetts
Butterfield, G. W.	MERSHCHRREITS
Campbell, Alex. A.	Pennsylvania
Campbell' Howard	E. California
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Carter, Robert S.	Maryland
Cassall Baul F	Obio
Cassell, Faul E.	
Catalano, F. Chambers, Thos. A.	New Jersey
Chambers, Thos. A.	California
Chanala James M	California
Chapple, James M.	Cantorna
Cisin, Clarence,	New York
Cisin, Clarence, Cisin, Harry G.	New York
Cissenfield, Samuel,	Maryland
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Clark, Ellef S.	Washington
Clark Joet E.	Michigan
Clark, Joet E. Clark, Paul M. Coffin, Richard H.	New York
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Coffin, Richard H.	Alabama
Cohen, Hyman E.	New York
Cohen, Louis,	New York
Conen, Louis,	New LOIR
Commerford. George	McK. Ohio
Conway, Horace B.	New York
Covey, Gerald,	
Cover, Gernia,	Indiana
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Cowden, John, Cowden, Reuel E.	California
Crosby, Carlton R.	
	Massachusetts
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Culbertson, Samuel	K. Kentucky
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Ellia, Melvin J. M. Enders, Charles P. Ne Ermatinger, Alex, E. J. W Evans, Walter Chew, Evans, Albert E. Co	Ohio chusetts innesats w York isconsin Illinois allifornia
Farria, Emil, Farria, Walter, Penn Fenton, Leonard, Ne Ferria, Willard J. Penn Fass. Sydney J. Ci Filson, Norman W. Massa Fink, R. New Finncell, Philip, C. Fitzpatrick, Charles E. Was Fritz, Paul, Penn: Folcer, J. Beasley, Forbes, Allen C. Ci Forwler, T. R. New Fox, Irving A. Ci	laryland Ohio sylvania w York sylvania lifornia hington sylvania Texas hifornia v Jersey hifornia lifornia
Gallo, Louis J. L. Gardner, Roy A. M Gerson, George I. Ne Gibason, C. C. New Goldsmith, Philip H. Ne Gordon, Charles O. C. Gogel, Adelbert, Gorne, R. Wallace R. Gorre, H. L. Gorrie, Robert, M Gould, H. W. Graff, Walter H. Ca Gibbs, D. W. Gittleson, Mitchell, Net Grienewell, Arthur M.	ouisiana lichigan w York Ilifornia Ohio Hawaii Illinois lichigan Ohio Ilifornia Ohio w York Oregon
Hackenberg, Nafanile, Hackenberg, Stanislaw, Haffen, Harry, New Hallett, Gena C, Waa Hallett, Eugene D. New Hamilton, Ben B. Harrigan, John J. M Hartie, J. W. Penns Harrey, Benj, J. Net Hartley, Edwin M. Penn Harrey, Guy H. Ca	Hawaii Hawaii Jersey hington Jersey Indiana lifornia aryland ylvania w York ylvania Jifornia Jifornia

Haynes, Robert W. Hecht, Royal H. Heck, J. Heilir, David J. Heinlen, Clinton D. Helgeson, Harry G. Helgeson, Harry G. Henne, F. Hingrina, Wealey Illinois New Jersey Pennsylvania Ohio Ohio Michigan Micihgan New Jersey New Jersey New York California Henne, F. Higgine, Wesley Higgs, H. Y. Hogard, Bonner F. Holden, Harry H. Hopkins, Sydney K. Hovelsrud, Frank H. Howerd, Edward S. Hudson, Joel E. Hudson, Joel E. Massachusetts New York New York Minnesota California Massachusetta New York Ohio Hutchinson, Arthur Hybarger, Jack A. Hyer, Charles Edwin, Louisiana New York Illingsworth, Fred H. Pennsylvania Ingalls, Herbert E. Massachusetts Jackson, J. B. Pennsylvania Jackson, J. B. J Jackson, Arthur F. Jaggers, Homer D. Johnson, Dwight V. Johnson, Richard, Jones, William H. Jorgensen, Edward T. Joynes, John T. Juvien, Ira F. Ohio California Illinois California England California Michigan Julien, Jra F. Oregon Kachoi, Fred J. Ohio Karlovaky, E. New Jeraey Karno, H. New Jeraey Kasner, Henry P. New York Keefe, Geo. M. New York Keefe, Geo. M. New York Keller, Kenneth W. Pennsylvania Kend, William P. New Jeraey Keller, Kenneth W. Pennsylvania Kiratead, Alvin E. New Jeraey Killam, Phineaa S. Massachusetts Kiraley, George S. Missouri Kneale, Charles K. Ohio Knaeireimen, Joaeph, New York Krasuer, Jacob A. New York Krasuer, Charles K. New York Krauter, Charles F. New York Krasuer, Charles K. New York Krauter, Charles F. New York Krauter, Charles K. Massachusetts Lazarus, Benj. N. Canada Lesson, Roger W. Massachusetts Oregon

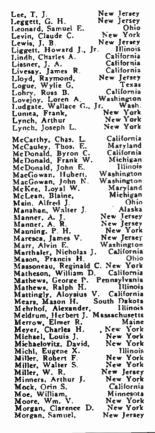
Texas

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OUR HONOR ROLL



Mousley, Franklin Muir, Alfred B. Muldoon, James J. Munroe, Henry T. Murray, Eugene M. Murray, W. Myers, William, Pennsylvania New Jersey Massachusetta Massachusetts Pennsylvania New Jersey Hawaii Naegel, Chas. F. Neel, William J. Neelv, Winslow W. Neelv, James T. Nelson, Franest L. Nelson, Francis A. Neuson, Francis A. Neumann, Walter E. Nichels, Clinton T. Nickerson, H. E. Nickerson, H. A., Jr. New York Ohio Ohio Pennsylvania California Miehigan Virginia Maryland Walter E. California Massachusetts Illinois O'Day, Howard H. Ogles, Lucian G. Oliver, Clark, Oliver, Donald B. Oliver, Walter, O'Neill, Wm. E. Orloff, Carl, Maryland Missouri Ohio Wisconsiti New York New York New York Pasquale, Anthonv. Passano, Lucian W. Patchin, Ivan, Payne, Frank W. Pendleton, Harold A. Petera, F Maine Maryland Ohio Ohio California New York New Jersey California California Peters, F. Arthur W. Peterson, Arthur W. Peterson, Kenneth, Phillips, W. Plaisted, Ross J. Podell, Peter, Podell, Peter, Powell, Joseph T. Powell, Joseph T. Powell, Joseph T. Powell, Agyden S. Precee, Richard J. Price, Walter E. Pute, Howard S. Peters, F. California New Jersey New York New York Louisiana New York Pennsylvania Alaska Florida Washington Pyle, Howard S. Oregon New Jersey Quinby, E. J. Rawley, Palmer B. Raymond, Frank M. Reb, Frank F. Redfern, Forrest F. Redfern, Otto R. Rengo, M. D. Reynolds, Gordon P. Pennsylvania Hawaii California Iowa Iowa New Jersey

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Maryland New York Indiana Ringgold, Paul C. Ringgold, Fall C Ritter, David, Ritter, Harry S. Roberts, H. P. Robinson, H. J. Roche, Walter J. Roche, Walter J. Ohio Ohio New Jersey New York Ohio New York Rosenquist, Frank W. Ross, Burt J. Rowe, Glenn S. Rov, Frank M. Ryder, H. Ohio Louisiana Oregon New Jersey Louisiana Rov, Frank M. Syder, H. Sanders, Edgar C. Schaible, W. Schmitt, Lawrence R. Schnarr, Charles W. Schuller, Charles W. Schuller, George C. Schweider, Arthur E. Scribner, Roy W. Seidel, Alexander, Shaw, F. W. Shecklin, George F. Sidnel, Robert G. Sidnel, Robert G. Simano, Alva G. Siloane, Bernard P. Mith, Hobert G. Smalley, Arthur C. Smith, Alan P. Swith, Hanar F. Sokutis, John, Spencer, Alvin C. New Jersey Ohio New Jersey New Jersey New Jersey New York New York California California California Ohio Washington Massachusette New Jersey New Jersey Maryland New York Pennsylvania Ohio Ohio Nokutis, John, Spencer, Alvin C. Spenser, Edward R. Springer, Ben C. Stelluti, Frank, Stengle, William, Stergle, George W. California Oklahoma Iowa New York Pennsylvania Sterling, George E. Stevena, Thomas M. Maine Maryland New York Stevena, Ihomas M. Stewart, Lewis B. Stone, J. Streniert, Carl, Svendsen, Michael A. Swanson, Carl S. Swanson, Howard, Tablot, Norman D. Tauforkack Legia F. New New Jersey Ohio New York Illinois Ohio California Taufenback, Leslie E. Taufenback, Leslie E. Taylor, Albert, Taylor, David M. Teesdale, Pobert, Tellefson, Eimer M. Temple, Otto C. California California California California Wisconsin New York New Jersey New Jersey California Thevenet, Clarence S. Thompson, H. Thompson, Maurice. Thompson, Wesley C. Ticknor, Reginald, Connecticut

Tierney, MattHew C. Massachusetts Townaend, George R. New York Towaaend, Pereival J. California Troiano, Joseph, New York Trosile, Clayton, California Turner, Zelphyr, Illinois Tylar, Walter, Virginia Umbarger, H. M. Ohio Umbarger, H. M. Ohio Umbarger, Charles F. New York Valentinc, Ray W. Pennaylvania Vandenburg, Chasa. M. California Vandenburg, Chas. M. California Vandenburg, Chas. M. California Vandenburg, Chas. M. California Van Hove, H. Venemon, Peter, Vermilya, Irving, Villareal, Dewey R. New Jersey New Jersey New Jersey Massachusetta Florida New Jersey California California Vogtman, J. Vogtman, J. Voas, John J. Walden, Myron, Wallace, Irving H. Walter, Icward N. Water, Icward, W. Ward, Donald G. Ward, William W. Watson, Noble B. Weaton, Noble B. Weber, John E. Weher, A. Weller, Alvin O. Michigan New Jersey Massachusetta Maine New Jersey Indiana New York New York New Jersey Ohio Weller, Alvin O. Werlein, E. Werner, Edward A. Illinois California New Jersey Wesighan, A. West, Howard E. Massachusetts Wexler, Bernard, White, Percy E. White. Laurance Pennsvivania California New York New Jersey California White, Dercy E. White, Laurance S. Whitehouse, F. Wiese, Fred T. Wilkins, Frederick, Wilkinson, Frank O. Wilkinson, Frank O. Wilkins, Harold A. Williams, Harph E. Wilson, Walter B. Wolfe, Albert E. Woolf, Albert F. Woolfe, Albert J. Wolfe, Albert J. Worlal, Ioseph A. Wright, Roscal C. Young, Stanley W. Zelphyr, Turner "Zihals, Joseph. S. Washington Ohio Wisconsin New York California Washington California New York New York New York California New York Indiana Florida New York Ohio Illinois Connecticut

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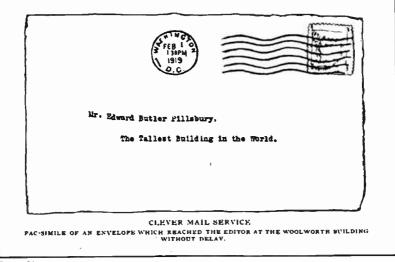
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Washington

FRONTISPIECE

We have with us this month Arthur A. Isbell, Division Superintendent at San Francisco, a native of the old Bay State, where he entered the telegraph service as a lad, and he has stuck to electricity all his life. He is a veteran radio man of wide experience, having joined the service of the original De Forrest Company. He served with various American wireless companies in different capacities, and traveled all over creation, finally settling down with Marconi as Division Engineer at San Francisco just prior to the war, on the outbreak of which he entered the Naval service as Expert Radio Aid in the Bureau of Steam Engineering at Washington, where he was engaged for a year in the difficult task of arranging the compensation to be paid the various radio companies by the government for the use of their stations during the war: That this task was accomplished to the mutual satisfaction of the Department and the radio companies is evidenced by the letter he received from the Department in acceptance of his resignation, which stated that he had "Discharged his obligations to the government in full, at this time of great emergency."

On returning to Marconi service Mr. Isbell was assigned to the Pacific Division, which includes the Pacific Coast and Hawaii. His genial personality has won a wide circle of friends and a charming wife.





WIRELESS COMMUNICATION WITH THE FAR EAST A paper read by Mr. Winterbottom before the Japan Society at New York

The progressive spirit of the Japan Society is clearly apparent in its desirc to hear a few words on the subject of wireless communication with the Far East, and few subjects today are of greater interest or importance to the American business man than improved and largely increased facilities for international communication. Without the opportunity for cheap and rapid communication between nations, commercial and social progress is seriously retarded, if not made impossible.

The Far East has long been in close telegraphic touch with Great Britain, and the channels of communication today between Continental Europe and the Far East are far more numerous than those we possess. It is less than twenty years ago when our telegrams for the Far East were sent across the Atlantic to Great Britain and thence forwarded either across northern Russia or through the Mediterranean on the way to Japan and China. The rate per word was very high indeed—some of the gentlemen present remember paying as much as \$3.00 per word from New York City to Japan. Japan at that time could hardly have been further from the United States.

The Commercial Cable Company, with a far-sighted vision, laid a cable from San Francisco to the Far East connecting up the Pacific Islands on the way. Our Far Eastern commerce at that time was quite small and it required considerable courage, and faith in the future, to literally sink from ten to fifteen million dollars in the Pacific Ocean. Great credit is due the men who laid the cable, permitting direct intercourse with the Far East and encouraging in a substantial degree the growth of our Far Eastern trade, and making possible a closer friendship and understanding between the peoples of this continent and those of the Orient.

The Pacific Cable brought the Far East much nearer to us than ever before. For in the telegraph fraternity, countries are near or distant according to the number of transmission points intervening. Prior to the advent of the Pacific Cable at least twenty transmissions were necessary to send a message from New York through Europe to the Far East, which, as you gentlemen well know, does not help to make cipher messages more readable. The Pacific Cable reduced the number of transmissions to three or four. If we could still further reduce these retransmissions, to that degree would we bring the United States and the Far East closer together.

This problem has at last been solved by wireless telegraphy, and direct and instantaneous reliable communication by radio is now possible between the Far East and the United States. It is only a few months ago that one of Japan's leading statesmen familiar with the progress of long distance wireless communication stated in a public address "The Pacific Ocean, which has so long widely separated our two countries, is now no broader than a river." Japan could hardly be nearer.

The fascinating story of long distance commercial wireless has unfortunately been interrupted by the great war. The Military and Naval authorities have taken over temporarily all wireless services for uses much more important than the requirements of commerce. The United States Navy has

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found the high power stations of the Marconi Company extremely valuable for European Communications and a few weeks ago submitted a bill to Congress providing for the permanent ownership of all wireless stations in this country. To have so monopolized high power radio communication would, I feel sure, have been a serious loss to the commercial world, but I am glad to say that the Congressional Committee unanimously voted against the Government ownership plan.

When the war is over and we are permitted to operate our stations commercially, a low-priced, rapid and reliable means of communication will be available for your use to Great Britain and the continent, Scandinavia and Russia, the Far East and Australia, and a little later Argentine, Brazil and other South American countries, Mexico and the West Indies. It is a large program but the greater part of it is already completed.

The first and perhaps most interesting long distance commercial wireless service was inaugurated in 1912—only seven years ago—between Great Britain and Nova Scotia. It is a little out of date now in its equipment, but it continues to render a satisfactory service between Great Britain and Canada, and at the present time some of our United States newspapers are receiving considerable quantities of European news over this route in competition with the cable services, as Mr. Roy Howard (President of the United Press) can verify. He told me only a few days ago that the wireless service is most excellent.

Other and much larger wireless stations erected by the Marconi Company are located in New Jersey, Massachusetts, California and Hawaii. Another powerful station is now under construction just outside Buenos Aires. The New Jersey stations will communicate directly with Great Britain and the continent. The Massachusetts stations will communicate directly with Norway for messages to and from that country, Sweden, Denmark and Russia. The complementary stations in Europe are completed and are only awaiting the proclamation of peace to change from their military character to that for which they were primarily designed. The stations in California have already rendered excellent service to Hawaii and the Far East, and will do so again as soon as they are released to us.

Our Navy Department has been making very extensive use of the Marconi high power stations for communications with Europe, working at all , times directly with stations in England, France and Italy. In view of the fact that some people today doubt the reliability of radio communication as compared with submarine cable communication, it is interesting to quote the words of Commander S. C. Hooper—head of the United States Naval Radio Service—who recently testified before the Congressional Committee just referred to. Speaking of the Marconi high power stations and the service they have rendered the country during the past eighteen months, he said, "They are the stations which will compete with the cables for the handling of messages overseas, and I am not making any new prophesy when I state that the competition will be keen. Since the war has been on we have established reliable communication across the ocean and we never miss a message from the other side." You will recall that the cable service to which the worthy Commander compared the radio service is over fifty

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years oN in development and experience, while we are only seven. Further evidence of the position now occupied by wireless is the recent order of Mr. Burleson directing that all Government messages for Europe, except those for some special reason routed via cable, should be forwarded by wireless. Since important and confidential Government communications may now be handled by wireless, we may rest assured that a new era of communication is at hand, the possibilities of which we can only conjecture. And now to mention the service to the Far East. In 1914 the Marconi Company completed high power stations near San Francisco and Honolulu to compete with the single Pacific cable, and offered its new service to the public. From the beginning it was extremely popular with the Hawaiian business men for they now had competition, and competition in oversea telegraph service is a fine thing. It usually results in cheaper rates, a more expeditious service, and greater satisfaction to the public. Such is the story of the telegraph service to Hawali. For almost fifteen years the citizens of Hawaii had to pay for every word sent to San Francisco--it mattered not whether it was plain language or code, important or otherwise-35c per word. This rate was never changed and the number of telegraphic communications between Hawaii and the mainland and vice versa, was very small indeed. The Marconi service opened at 25c per word-a reduction of 10c per word-and further, introduced the popular night and week-end letters to the Hawaiians at a rate of approximately 8c per word. Reflect for a moment-rates reduced from 35c to 25c and 8c per word. No wonder the Marconi Company has so many friends and supporters in Hawaii, that small but important mid-Pacific outpost whose Chamber of Commerce sent a representative to Washington to raise the official voice in loud protest at the proposal for Government ownership of all wireless services. The business men of Hawaii have had a practical demonstration of the reliability and rapidity of commercial wireless, and are urging its early resumption by the Marconi Company. Suffice to say that within two months the submarine cable tariff which had stood so long was lowered to the level of the new wireless tariff, and it is generally acknowledged that within two or three years the number of telegraphic communications to and from Hawaii was increased fourfold,

The trans-Pacific wireless service was not planned to stop at Hawaii. The Far East and even Australasia was our goal. Our Hawaiian station had been built at a cost of almost \$2,000,000 in two distinct sections, one to work to California, the other to work with Japan, both sections to work simultaneously. But the war again interfered. The Japanese station built at the same time was taken over by their Navy Department (for Japan, too, was at war) and it was not until 1916 that the station was released to commercial operation nine hours per day. Nine hours per day is not a very satisfactory way of conducting a telegraphic service, but it was the best we could get until peace came, when we could expect the full use of the station.

In 1916 I went to Hawaii to supervise the inauguration of the first wireless service conducted between the United States and Japan. The usual messages of felicitation were exchanged between President Wilson and the Emperor of Japan, Ambassadors and other notables, and then we settled down to commercial business. The cable rate from San Francisco to Japan,

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which had prevailed for years, was \$1.21 per word with no deferred or other cheaper service. The Marconi service opened at 80c per word for urgent communications, or a reduction of 41c per word, and also offered for the first time a non-urgent service at 40c per word, a reduction of 81c per word. The service was immediately so popular and satisfactory that some means had to be adopted to curtail the volume of business offered for transmission, as it must not be forgotten that we were restricted to 9 hours per day and that was divided into three periods. It was therefore decided to confine the service to the City of San Francisco, which is perhaps our second largest center of Far Eastern trade.

Although it was expected to utilize the Hawaiian station as a necessary relay point for Japanese messages, it was soon discovered that practically all messages transmitted from the Japanese station were received with equal facility in California, and it was only occasionally that the assistance of the intermediate station in Hawaii was required. Further recent improvements in the radio art have assured the regularity of this direct Japan-United States wireless service.

I might add that while I was in San Francisco several of the large Japanese steaniship companies and export houses expressed their amazement at the high-grade service we rendered. The accuracy of the service, due to the elimination of relay stations, was most gratifying and the economy of course was fully appreciated. The service continued to increase in efficiency and volume of traffic until April 7, 1917—the great day in our history on which war was declared upon Germany—when the Navy Department commandeered our stations and has not yet permitted us to resume commercial operations. I understand that since the armistice the Navy Department has been offering a limited public wireless service from San Francisco.

And so, gentlemen, science at last brought the United States and Japan very close iudeed; and, with the advent of freer and cheaper communication, we may confidently look forward to a constructive age of peace, good-will and a better understanding between the once widely separated peoples of the world.

MEXICO

By apparent contradiction of terms Mexico is one of the richest and poorest countries in the world—richest in its natural resources and poorest when the condition of its masses is considered. The great Humboldt, after he had explored and mapped Mexico declared it to be the "Treasure-house of the world."

For four hundred years Mexico has been the greatest silver producing eountry of the world. Its gold mines are among the richest. It ranks third in the world's production of copper. Perhaps its greatest single source of wealth is its oil. A stretch of territory 100 miles wide extending over 700 miles along the eastern coast constitutes an endless opportunity for those interested in the development of the oil industry. One of the wells in this

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territory called "El Potrero," holds the world's record with a flow of 100,000 barrets per hour.

From the commercial standpoint the development of Mexico is yet very young. From the spiritual angle perhaps the same is true. Commercially and spiritually there is an opportunity here which cannot be paralleled anywhere in the world. Mexico produces everything from coffee and rubber of the tropics to corn and wheat of the temperate zone. At the same time, as the Mexican Consul has pointed out, its world market is located at its very door, for we here in the United States demand and need everything it produces. Other nations are coveting this wealth. We find 75 per cent. of the national wealth is owned or controlled by capital abroad.

Here is a country with a civilization perhaps as old as the civilization of Ancient Egypt. We point with pride to the founding of Harvard University in 1640. The University of Mexico was founded nearly one hundred years earlier and its scholars were writing and printing books before the Pilgrims had landed at Plymouth Rock. Their churches and cathedrals surpass anything we have in this country to this day.

Mexico is indeed the "Treasure-house of the world," but 1 per cent. of the people own 90 per cent. of the wealth, while the masses live in wretched poverty. The Government is poor and has never had money enough to organize its activities, to establish the needed schools, to develop its backward industries and to give its submerged classes a chance to rise. Consequently Americans are much misunderstood and our interest in Mexico suspected. It is equally safe to say that we as a nation do not understand Mexico and Mexicans.

Recently, in a school at El Paso, Texas, the nephew of Carranza, a son of Villa, a son of Salazar, the bandit, and a son of President Madero sat at perfect peace with each other at a dining room table Between 1810 and the year 1875 Mexico had the distinction of fomenting and actually "putting across" 200 independent revolutions, equaling in speed almost the revolutions per minute of some high-powered turbine! Fifty-two presidents have seen their inaugurals during that period of sixty-five years.

SPEED UP THE TELEPHONE

You will quicken your own service and also that of others if you will cut out every superfluous word when calling for a connection. When your operator asks, "number please," say "John 2360" or "Mr. Peters at Hanover 7177," etc. Do not waste her time and your own, besides tying up the line, by saying, "Anna, please give me," "I want," "Get me," "Call," "Will you call," etc. Superfluous words are omitted instinctively in using the telegraph. Why not, also, in using the telephone?

THE DIRECT CHARGE

The direct cost of the war is somewhere between \$170,000,000,000 and \$180,000,000.

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A LINE FROM VLADIVOSTOK

In this frozen, barren. God-forsaken country, I can't help thinking of our Garden of Eden, the U. S. A. It seems almost a misfortune for anyone to be born in a country like this even with a perfect government. Vladivostok, before the war, had a population of about 90,000. Now there are 200,000 refugees living in box cars, barns and dry-goods boxes. One relief ship has arrived and others are en route, so that suffering will soon be reduced to a minimum. The temperature is 28° below freezing as I write, and the sun is shining brightly. Several large ice-breakers are busy in the harbor all the time, keeping lanes open for shipping. German prisoners are used to unload relief ships. It seems fitting that they should assist in relieving the suffering they have caused.

My ship goes from here to Manila, Hong Kong, Shanghai, India and then good old San Francisco.

E. W. H.

POSTAL SAVINGS DEPOSITS

The total amount of postal savings deposits in the New York Postoffice, covering Manhattan and The Bronx, on October 21, was \$34,332,388.

LOVE TRIUMPHANT

The beautiful girl who had recently taken a job as stenographer in an office where the force had been sadly cut down by the war and who toiled all day over an extensive business correspondence, was waited upon in the evening by a middle-aged gentleman who had fallen in love with her.

"Will you let me kiss you?" he said.

"I have your favor of even date and will reply later," she responded dreamily.

"But, my darling, I cannot wait," he expostulated; "time presses.""

"I take the liberty of calling your attention to the great dearth of labor, and trust you will not place your order elsewhere until-"

"Excuse me, dear, but one kiss."

"As you are doubtless aware, the shortage of raw material has placed us at great inconvenience—" $% \left({{{\left({{{{{\bf{n}}}} \right)}_{i}}}_{i}} \right)$

The middle-aged gentleman waited to hear no more. He sprang towards her and, clasping her firmly in his arms, which, though exempt from military service, were still able to hold on to a good thing, kissed her passionately. And then she murmured, "May I not express to you my warm appreciation of your devotion. Trusting to hear from you again, I am, cordially and sincerely yours—"

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CENTRAL AND SOUTH AMERICAN NOTES

A recent issue of the Bulletin of the Pan-American Union contains the following:

"A daily newspaper of Managua states that a Mexican gunboat is soon expected to arrive at Corinto with material for the installation of a wireless telegraph station presented by the Government of Mexico to that of Nicaragua. The station is to be of the same power as the one given by the Government of Mexico to the Government of Salvador. The same vessel will also bring the Charge d'Affaires of the Mexican Government, near the Government of Nicaragua. Other members of the Mexican legation in Nicaragua is a detachment of Mexican marines who will accompany the party into the interior for the purpose of presenting to the President the wireless station referred to."

From the same official journal, under the heading of Mexico, is extracted the following:

"A wireless telegraph station was recently established at Pungarabato, State of Guerrero, powerful enough to communicate with the stations at Chapultepec, Acapulco, and other distant points of the Republic."

Preliminary steps have been taken looking to the erection of a wireless station at La Paz, Lower California.

From the same journal, under the heading of Chile, is extracted the following:

"The Telegraph Congress, which met in Conception recently, recommended, among other things, the publication in Concepcion of a monthly periodical devoted to the interests of telegraphers, the establishment of a federation of Chilean telegraphers with insurance, mutual aid and educational departments, the pensioning of telegraphers, after twenty-five years of active service, the construction of an early telegraph line from Temuco direct to Santiago, a minimum wage of 150 pesos (peso equals 32c) for beginners, a maximum eight hour day with increased pay for extra service, equality of preparation for telegraphers of both sexes at the time of entering the service, and rewards for long and efficient service."

FRANCE TO GET AMERICAN OVERSEAS STATION

The French government is expected soon to take over from the American Navy what will ultimately be the most powerful wireless station in the world. It is located at Croix d'Hins, near Bordeaux, and will consist of eight towers, each more than 800 feet high. It will be able to transmit messages not only to all parts of the United States, but perhaps even to Honolulu. Construction was begun a few months ago by the American Navy for the American Expeditionary Forces, with the understanding that ultimately it should be ceded to France.

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BURNING OF THE KILBURN BY H. BODIN.

The S. S. F. A. Kilburn sailed from Havana bound for New Orleans by way of Key West for fuel oil. All went well through the night up to 5.45 a. n. when I was awakened by cries of "fire." Dressing myself in a hurry I came out on deck and saw flames and smoke coming out of the engine room around the smoke stack.

I went immediately to the Captain for orders but unfortunately he had been seriously ill for 4 or 5 days and could hardly move out of his bed. I asked him if I could send a call for help as everybody was taking to the lifeboats, but he requested me to open the ship's safe in his room, being the only one on board, outside of the Captain, who knew the combination.

After that I rushed aft to the wireless room through the thickening smoke. There was no current from the ship's dynamo and I connected the auxiliary set sending three times "S O S, S. S. Kilburn aftre 25 miles off Key West bound from Havana". I could not listen in for an answer as the room was rapidly filling up with smoke and the lifeboats had by that time gotten away from the ship. I came out on deck and when the first officer's boat saw me they came back to take me off. The sea was choppy.

The small sail of the lifeboat was set up and at 7 a. m. we sighted smoke on the horizon. Two ships were coming to us, one was the big American oil tanker W. M. Irish and the other a camouflaged British oil tanker bound for Tampico. At 8 a. m. we were climbing on board the Irish and at 11 o'oclck we got transferred to a sub-chaser, landing at Key West about 2 p. m. same day.

Everybody was saved but I came very near getting left, as I did not realize at the time that the lifeboats had gone away from the ship so soon; and I understand that some of the coldfeters of the last lifeboat objected strenuously to rowing back to take me off the wreck as they thought the oil tanks might explode any minute.

The fire was reported to have been caused by the oil feed pipe bursting

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in the fire room near the boilers. The heated oil caught fire and in a very short time it was beyond control of the 3 men on watch down below. The pumps could not he used and the Kilburn being a wooden ship, the fire spread very quickly, the smokestack and the masts falling over the side within less than an hour.

LETTER WRITING AND LETTER WRITERS

In many cases, of course, you will not write a letter at all; you'll telephone. But there are cases where a letter is required, and when it is, it should be a letter that will fittingly represent the Company whose name appears in the upper left-hand corner of the envelope. And this applies to both contents and appcarance. A good letter makes the same impression as a neat and knowing salesman or a courteous telephone call; a carelessly worded and slovenly executed letter does not always get the attention that the subject may deserve.

"What is a good letter?" asks some one. We'll call on a man who has been dictating and reading letters for years.

"To my mind, a good letter must be clear, courteous and complete. Remember the three C's. By clear, I mean that it shall not only be neat and well arranged on the page but the words and phrases used must be selected with care, so they will best express the idea to be conveyed. By courteous, I mean just that same kind of courtesy you are expected to use when talking over a telephone or face to face. By complete, I mean it should give the full information necessary to the proper understanding of the matter by the person who is to receive it."

We might elaborate a little on our friend's definition. To be clear, the words and phrases used in a letter must express the idea in a way that that particular person will understand. An explanation which would be perfectly clear to an engineer might be a perfect puzzle to a grocer, and a formal business letter which is a daily matter of routine with the lawyer is likely to be a document of mystery to the laborer.

A letter that is not complete is aggravating. You write a letter to somebody and sit back and wait for the answer. When you get it, it tells you about certain things—and very little or only a part of what you really want to know. You have a feeling that the writer of the letter is trying to evade something, and you feel that you have not been fairly treated.

It should not be necessary to dwell much on courtesy. Perhaps it will be sufficient just to say that a letter must be courteous—always. Discourtesy in a letter is just as disagreeable, and just as good a way to unmake friends, as discourtesy over a telephone.

"If there's one thing in a letter that makes me want to fight," said a telephone official, "it's the phrase, 'In reply to yours of recent date, I beg to say.' Why don't they go ahead and 'say' and forget the begging?" Ready-made phraseology like this is likely to become a bit too common.

The companion of the man just quoted chirped in. "It's the cold formality of letters I receive that makes me tired. I cannot understand why

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it is that a man you've known all your life will write you a cold, fishy letter that makes you think he's mad about something."

He probably has received letters written by folks who are perfectly natural while they are talking, but perfectly artificial, cold, stiff and formal in their letter writing. It would seem that a man should write almost the same way that he speaks—that he should have a style or personality in his letters which would mark them for his very own. Letters should breathe a spirit of helpfulness and good cheer even though they are on strictly business subjects. Business is not a little tin god that demands the sacrifice of all human expression.

Now, let's come right down to the letters we write the public. In the first place, we must keep in mind that the letters we write are not from ourselves, but from the Company. It is true that we write the letter and sign our name, but in reading the message the recipient has in mind the Company and not us as an individual. Having that responsibility on us, we naturally must be careful.

One thing that gives the public an excellent impression of any company is the immediate answering of letters, either by telephone or by another letter. "I wish I could impress it on all our people," said a department head, "that we should at least acknowledge a letter the same day it is received. We may not be able to get out immediately the information asked, but we can certainly tell the writer we have received his letter and that it will be given prompt attention. Think of the splendid reputation our Company would have if everybody in it would make it a point either to answer or acknowledge a communication the day it is received."

Why not, friends? We know of one large, busy office that does it. Why not others?

Another thing that is frequently overlooked. When a letter is addressed to one department and referred to another, the department reciving it first should inform the writer as to whom it was referred and why.

Letters should be thoroughly read before they are answered. Many of the fractional answers sent out are the result of careless reading of the original letter.

When the stenographer hands the letters over for signature they should certainly be carefully gone over by some one in authority. A letter that sounds all right while dictating may look altogether different on paper.

When a report is asked for, or certain information that looks as though it might be intended for filing with other papers, it isn't well to drag a lot of other matters into the same letter. Better make two letters.

It is always a mark of courtesy and friendliness to address your letter to the individual in his official capacity rather than to the company or to the position he holds. For instance, "Mr. Henry Smith, General Manager, Complex Anto Company," is better than "General Manager, Complex Auto Company."

Now for a few remarks by stenographers about the folks who dictate letters and a few about the stenographers by those who dictate.

"All I ask," says a young lady who has been a stenographer for several years, "is that the person who dictates speak up so I can hear him.

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It doesn't make much difference to me whether he goes fast or slow, or repeats, or has an impediment in his speech, or speaks with an accent—but I do like to hear what he is saying."

Another girl complains about the man who will not concentrate on what he is dictating. He sticks his face down in his vest and lets his mind wander out over the town, or looks out the window at something going on in the street, and forgets there is a stenographer in the room.

Then there is the man who is undecided as to what he is going to say. As the typist in "People Seldom Heard From" remarks, "They say a woman changes her mind oftener than her clothes, but Mr. E. Razit can beat that."

Once in a while a stenographer finds she has to deal with what may be described as a "punctuation fiend." He dictates a couple of words and adds, "comma there," goes on a little further and says, "Make that a capital." All of which, if the stenographer be one worthy of the name, is unnecessary. Punctuation is a part of every well-trained stenographer's education, and, except in special cases where conditions require peculiar or complicated construction of sentences and paragraphs, it may be safely left to the stenographer.

"I'm afraid." said one little girl, "that I've spoiled my boss. I fix up nearly all his letters for him. He knows it and dictates any old way. Why, if I wrote a letter exactly the way he dictates 'em, the person on the other end would think he never even went to night school."

We'll consider next the man who fusses around the room while he is dictating, picking at threads on his clothes, pulling at his collar and tie, pushing back his hair, rattling papers and shuffling his feet. From this individual," say the stenographers in chorus, "may the kind fates deliver us."

Other dictators who come in for discussion every time a bunch of typists get together are the man who mumbles, the lightning talker, the man who doesn't know there is such a thing as a period, the one who dictates in fits and spasms, the one who uses words no mortal ever dreamed before and the man who is just naturally a crank. But why go into the horrible details? Any man who is guilty of any of the foregoing sins will probably recognize the fact without further preachment.

However, the sins of omission and commission are not all on one side. Listen to what a mere man has to say about stenographers:

"I find." said a man who dictates letters and memoranda every day, "that there are many stenographers who, after years of experience, are still lacking in rudimentary knowledge of spelling and punctuation."

The arraignment is severe, but there is probably more truth than poetry in it; and that is probably the reason why you can get about half a hundred replies if you put a little two-line advertisement for a stenographer in the newspaper.

"There's another thing I'd like to mention. Often a stenographer is rapid and accurate enough to suit anybody, but she lacks the artistic sense in getting her letters on paper. She neglects the physical make-up of what she prepares.

"Now nearly every man likes to have his letters placed in a certain way on the page, or has a pet arrangement for the address on the envelope.

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Yes, I know that the business schools teach that thus and so is proper, but there are all kinds of things you never learn at school. I claim a stenographer ought to give a man what he wants in the way of a letter, provided it is in harmony with the Company's wishes; and if she doesn't know, let her ask him if he prefers any particular style."

He went on to state that when he gets a new stenographer he has a sort of conference with her, so that she will know just what he expects of her in the way of physical make-up of letters.

Another told of an experience which he says comes one day to every man who dictates letters. Here is the way he told it:

"Your regular stenographer is away, and another girl, whom you have never seen and do not know, is taking her place. You push the button and she comes in, looking capable enough. You start to dictate and her flying fingers take down everything you say as fast as you say it. She doesn't ask you to repeat. When you pause for breath she's right up with you.

"After a time you are thinking that she's pretty fine. You dictate for a couple of hours and clean up everything on the desk, and she sails out to the typewriter, while you go around the place telling folks what a big morning's work you've done.

"Late that afternoon the lady lays on your desk the result of her labors on the machine. You read over a couple of letters, but you fail to recognize them as children of your brain—they don't make sense. The horrible truth dawns on you. The girl was anxious to make speed, but she couldn't read her marks after she put them down. Then you get busy making corrections."

Another boss said he hadn't anything against stenographers in general and his own in particular, but he was afraid that some of them get in a bit of a hurry around whistle-blowing time and fail to read over the letters before shooting them in for signature. They forget that the boss may be in a hurry, too, and thinking the stenographer has read them, will sign without reading.

"The ideal stenographer." said still another, "is the girl who uses her head. She ought to have sense enough to know when to consult the boss about a correction and when to make it herself. I don't like to have the young lady running in every couple of minutes to ask me if I meant such a word, when common sense tells her it should be that—or something else. Of course, if she runs into a mass of technical or strange phraseology that doesn't seem to make sense, she should consult the man who dictated it rather than to try to patch it up herself and thus make a bad job worse."— Exchange.

NOTES FROM THE WORKS

Our Band gave a dance New Year's Eve in the Arcanum Hall in Elizabeth. This event proved to be so popular that the band is now proposing shortly to give an entertainment and dance. Our band has quite a circle of friends, not only are we proud of it in the factory but its music is demanded

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in quite a circle of friends outside of the factory. It holds a very enviable position among the bands of Union County. Mr. Stein as Works' Manager and Mr. Benson as General Shop Foreman take great pride and interest in the progress which the band has made. During this summer it is planned to give a number of open air concerts. Mr. Arthur Osmun, our band master, is a professor of music and master of a large variety of musical instruments, and we are indeed fortunate in having such a man as leader. He has entered into the work of training the band whole-heartedly, giving his time and services unselfishly. His enthusiasm has been contagious and every man in the band looks to him as indeed a leader. He has been very loyally supported by all of his men, (who now number hitry-eight) and especially by E. R. Welch, the assistant leader and band manager.

The band regrets very much to lose at this time of its clarinet players Mr. Wm. H. Howard, who goes to the Philippines; but it may be while Mr. Howard is there he will learn to use a musical instrument for which the Islands are famed, and so be able to add a delightful orchestral instrument to the band when he returns.

Commodore Stein has quite an automobile fleet which follows him on parade or maneuvers. Latest to be added to this fleet is Dr. David Leonard's Buick.

Our factory employees are very versatile. Gus. Kachelreiss has made quite a record for himself in the assembling of flying boat sets. We presume that he must have taken a flight, for on January 1st he landed on a farm in Westfield and next Thanksgiving we all expect to eat down on the farm.

Mr. Ralph H. Langley of the Engineering Department is the proud father of a new daughter, Jane Hale, who made her debut on January lôth; weight, six pounds.

Mr. and Mrs. Robert Forshaw of 37 Walnut Street, Roselle Park, have announced the engagement of their daughter Alice M. to Francis C. Brockman of Nazareth, Pa. We heartily congratulate Mr. Brockman and wish Miss Forshaw the supreme happiness that the world has to offer her. Mr. Brockman is a member of our engineering staff and a graduate of Lehigh University, and in the humble opinion of the editor is such a man as any girl might be proud to have for a husband.

It has come to our notice that on New Year's day Mr. Lemon's able assistant in the Production Department, Mr. Maurice Berger, slipped off to New York and brought back with him a bride. Mr. Berger is a modest man and it was only by chance that we found this out; however, all good wishes are extended to Mr. Berger and his bride for a happy future. He began the New Year well.

Mr. W. H. Howard of the Engineering Department has accepted an assignment to the Philippines. Mr. Howard has always been popular and the band thought it fitting and proper that he should get more than any ordinary send-off. The band gave a concert during the noon hour in the course of which Mr. Stein, on behalf of the band, presented Mr. Howard with a handsome carbuncle scarf pin. In the course of Mr. Stein's remarks he pointed out to the younger employees of the Engineering Department the remarkable progress made by Mr. Howard since he entered the Marconi

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service, having devoted most of his spare time to the study of the science of wireless telegraphy and having worked faithfully and loyally until selected as the most suitable man for this important assignment. Our readers may recall that about a year ago Mr. Howard's picture was entered in our column in connection with the awarding of a medal for services which he rendered the U. S. Government on the Mexican border. Mr. Howard, in replying to Mr. Stein, said that he felt signally honored at the public farewell tendered him, thanked the men for their fine friendly spirit and regretted that he had but one life to give to the Marconi girls. Vive la Marconi Spirit. We were specially honored on this occasion by the presence of Mr. Ogden of the Legal Department,

OBITUARY

We regret to announce the death of Mr. James Long, who was formerly Night Foreman in charge of our screw machine department. Mr. Long was an expert in screw machine work, highly respected by the men over whom he had charge and by the administration of the factory. He was born in Fayetteville, N. Y., in 1868. During the war he was a very heavy buyer of Liberty Bonds and a thorough American. Our sympathy is extended to the family.

During the past month we have also lost by death Mr. Frank Schmidt, age 28 years. Mr. Schmidt was born in Germany, but was an American citizen and displayed it not only by working very hard during the period of the War but by buying Liberty Bonds to his utmost. The case of Mr. Schmidt is especially sad because he recently lost his wife and leaves a little girl baby.

MARCONI INSTITUTE

A NEW DEPARTURE

The importance of obtaining a first-class knowledge of mathematics in order to engage in advanced electrical work is recognized by all. Many wireless operators and electrical workers find that their lack of a mathematical education prevents them from advancing to higher positions in electrical engineering or installation work.

The average mathematical course is so tied up with the standard college and high curriculum that the student requires from three to four years of close application along with other studies to qualify as a mathematician and because of the time required to complete such a course he is not apt to give the matter serious consideration.

Many young men who otherwise have received a fair education are not capable of solving simple mathematical problems and are unable to employ, usefully, engineering mathematical formulae. Realizing the urgency for such education, backed up by requests from hundreds of young men for such instruction, the Marconi Institute will inaugurate at an early date a course devoted to ELEMENTARY ENGINEERING MATHEMATICS.

This series of lessons will be conducted by Capt. Gordon Adams, formerly of the British Army, who has had extensive experience in teaching engineering mathematics to men of limited education. He is recognized as an expert, having taught the principles of aeronautical engineering at the

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Central Flying School at Upavon, England. He has also acted in the capacity of instructor in wireless engineering mathematics at London University, and his years of experience in practical engineering instruction highly qualify him to conduct the mathematical course at the Marconi Institute. He is also an expert in musketry, ballistics, optical work and range finding.

The proposed plan of instruction will begin with the fundamentals of Algebra and will proceed through the principles of Plane and Solid Geometry, Trigonometry, Co-ordinate Geometry, Mechanics, Spherical Trigonometry, Imaginaries. Expansions and Series, Hyperbolic Functions, Mathematics of Alternating Currents, Differential and Integral Calculus, Logarithms and the use of the Slide Rule.

The course, as above outlined, will be accompanied by practical problems in Mechanics, Navigation, High and Low Frequency Alternating Currents. It has been specially planued to aid young men in understanding the use of mathematical formulae met with in electrical engineering practice.

INSTITUTE NOTES

The Marconi Institute has just added to its international fame by having as students two gentiemen of China, Messrs. T. C. Chen and Y. C. Fong. They are now completing their sojourn of about five years in the United States during which time they have been busy acquiring a thorough electrical education and are about to return to China, taking with them degrees of Masters of Science.

Mr. Chen came to the States in 1913 and soon after his arrival was engaged in the testing laboratories of the General Electric Company at Schenectady. He remained there for one year, after which he entered the University of Michigan, completing the electrical engineering course in three years and obtained his degree. With a view to furthering his education he then went to work in the plants of the Western Electric Company and later the Goodman Manufacturing Company, where he specialized for a time on armatures and armature windings. He later returned for a short stay at the General Electric Company's plant, where he completed his studies about the end of October, 1918.

Mr. Fong arrived in this country early in 1914 and shortly afterward entered the University of Michigan, where he stayed for two years. He then transferred to the University of Minnesota and completed his course in one year, obtaining his degree. He then joined the forces of the General Electric Company and was engaged in the laboratories and shops. Mr. Fong has all along specialized in wireless telegraph engineering and informs his American friends of his firm belief in the early world-wide expansion of the art. Especially does he see an admirable field for the work in his own country. Mr. Fong and Mr. Chen joined the Marconi Institute last November, and their earnest and attentive work has been rewarded by rapid progress.

They leave our shores for their return home early in April and carry with them the best wishes of their many friends at the Institute for their future success.

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CHRISTMAS IN A HOSPITAL IN FRANCE

CHRISTMAS EVE.

The bells are ringing now and Christmas day is almost here. The crowds are going by on their way to church, for I can tell by the songs that float in to us from some of them; but I venture that most of them are going by silently, thinking of other days and times when their dear ones attended this service with them. Some of those dear ones have gone into Germany, and some others will never return. It is a sad Christmas for the world, wherever a folk might live, but a leavening influence as well. This hospital is built in the shape of a square, and at the open side is a gate. When a stranger comes to the gate a big bell rings. Rather an old-fashioned custom, taking the mind back to the medieval times constantly. Last night the bell rang, and six ambulances came theobbing in, loaded with soldiers in every state of suffering.

Tonight the bell rang again, but it was not an ambulance this time. Of course, we could not see who it was, but we soon found out. Most of these boys try-and most always succeed-to put a brave and cheerful side outside. They speak of home quite frequently, but as you would, don't you know. Not indifferently, but as something with which they were in daily contact. Never do they call up sad reminiscences. At least they do not in public nor in the hearing of their fellows. So we go along, each to his own remembrances, but trying to buoy up the other fellow. And we succeed so well that sometimes we even forget that the other fellow has a great big starving place which cannot be satisfied by anything nor any one, but those folks of his back in the States. Tonight we all did our best to keep each other from thinking that our minds were overseas. And we succeeded wonderfully. When this bell rang some one even remarked that "there must be Santa Claus." We all laughed and made light, but we afterwards found out it was an angel. Just as the bell rang some girls in the U. S. uniform came in and gave each of the men a package of tobacco and a small package of home-made candy. I talked to one, and she said they had figured their Christmas would not be very merry, so the merriest they could make it would be by giving these things to the soldiers in the hospital, trying to make them merry. A small present, but a-, well a grand sentiment and lovely act. What? This had a quieting influence on the men and they were rather thoughtful for a minute, when out in the court arose the sound of the most beautiful singing-Christmas Carols. Nobody saw the singers. It was as if these songs were wafted down from the sky. First on one side of the court, then dimly heard on the other side-out of the darkness came this full chorus. One looked at his neighbor, startled; and then looked toward the wall more quickly. Way over on the other side of the court and in back of the first line of buildings are the German prisoners, several hundred. These chaps were crowded in the openings, wherever they could see, with thoughts no doubt far removed from here. And then these W. A. A. C.'s (wacs), 25 of them, as we learned afterwards, approached these prisoners and, after four years of suffering, fear and strafing, such as the Germans

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gave the families of these English girls, they sang to these poor men, "Holy Night,"-("Heilige Nacht,")-and in German!

Over at the Red Cross hut tonight all those who can walk are invited to a Christmas Tree party. It is mighty nice, and the Red Cross is giving all the credit to the folks at home. Each boy is getting a pair of woolen socks filled with nuts, candy, fruit, cigarettes, handkerchiefs, etc. The Red Cross is wonderful. There is a boy across the room who just came back tickled to death with his present, his stocking full. He bunks right next to a boy who has his leg shot off and cannot walk. This cripple put on a cheerful smile when his neighbor returned, but ill-concealed his disappointment that he, too, could not go over. Eyes are quick over here, and heads are old with understanding. These two youngsters are now dividing and eating the "Christmas Gift through the Red Cross from the Folks at Home."

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It is now Christmas morning. Christmas of 1918, somewhere in France. Santa Claus has been here, too. Over my head hangs a home-made stocking, made out of flanuel and ribbons, filled with home-made candy. A remembrance from one of the nurses. On the table is a beautiful bouquet, and two more stockings, also from the nurses. And there I find also a cigarette case and a check from home. This morning the Government undoubtedly thought it should act as Santa Claus also, and I was informed that I was by Special Order promoted; however, I shall always be lame.

Today I learned that they held memorial services for my poor pilot in his home town. I am sending a photographer out tomorrow to the cemetery so I may take to his father and mother a picture of his grave.

Of our detachment of 52 at Garden City, 18 have been killed at the front, 20 have been wounded, 9 have been decorated by the French on Americans, 3 are prisoners in Germany, 1 is interned in Switzerland, and I have been permanently hurt in an aeroplane accident. Quite a record for our detachment, don't you think?

Every man in the A. E. F. had a big meal today. Some had turkey and mince pie, while others had bully beef and canned jam,—but the sauce, the desert, was all the same—thoughts of the dear ones back home. And I thought on that subject a good deal and longed for the close proximity of some one for whom I cared and who cared for me. Why! I'm sure I could go out after that and capture the world! Well, it will come tout a l'heure, and I must not think further or I will get impatient with nature and the doctors, and then there would be the deuce to pay. Their constant song to me is "wait, don't get impatient." Yes,—wait! My only pleasure in this hospital, the one thing I long for and look forward to, is my return. And they seem determined to make me stay, I believe, until I can walk. I become so impatient and irritated I can hardly contain myself, but it does me no good. They simply smile and hold my hand.

Gosh, it's dismal today. Dismal every day. "I want to go home. I want to go home. Oh, my, I don't want to fly. I want to go home." (Rendered with feeling.) Here is a new song I'll sing you on arrival:

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Beside a Belgian water-tank, on a cold and wintry day, Beneath his busted bi-plane, a poor observer lay. His pilot lay on a telegraph pole, and he was almost dead, While he listened to the last words the poor observer said:

Oh, I'm going to a better land, a land that's always bright. Where cocktails grow on bushes, and you stay up all the night. You never have to work at all—not even change your socks, And sparkling "Vauvray" on each side, A trickling down the rocks.

(Vauvray is a famous wine of Touraine, upon which officers and soldiers subsist during periods of depression and homesickness. It possesses the quality of rendering the person indifferent to sadness, reverses, cracked skulls and blackened eyes, traffic, etc., sometimes even to bodily discomforts, for frquently persons after drinking this magical potion have been found reposing upon hard paving blocks, apparently in sound and refreshing sleep.)

It is almost time for taps-that wonderful call they play for soldiers to sleep, their nightly repose as well as their last one. Tattoo has sounded and I must close with this page.

Suppose a number of the boys are already home. Hope they received an ovation. They deserve it if they have seen service. You will note a vast difference between those who have been in the real thing and those who have had a vacation in France. The boys who have been up against it will not be talking very much either."

LITTLE JOURNEYS TO THE GREAT LAKES

A MIDWINTER VISIT

Willis K. Wing

Someone once accused the English of being provincial and said that their interests and knowledge were confined to their own little island. Wasn't it Kipling who called them "Islanders?"

We, in the United States, sometimes labor under strange ideas of our own country and the person who invented the slogan "See America First" was not altogether obsessed with the hope of selling excursion tickets. There is a grain of wisdom in that oft-repeated phrase. Similarly, all of the ice in the winter months is not confined to the wilds of Siberia and the lovingkinchess of the gentle Bolshevik soldiery. Most of us will recall days of our youth when we awaited with great joy the first day of cold weather which would freeze the pond of fresh water. That meant skating joys; but to have great fresh water inland oceans frozen over would present a joy indeed to the youngster with his pair of skates.

The season of navigation on the Great Lakes closes on December 15, when most marine insurance expires. In ordinary seasons, Lake Superior, that mass of angry waters, is calmed in the grasp of King Winter and his crew of Little Ice Devils. In 1918 it was reported near Duluth-Superior harbor that the ice was more than 20 feet in depth and other cities along the shore reported similar depths. Lakes Michigan and Huron are hardly ever

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entirely frozen over, but navigation would be attended with great difficulties. Great amounts of floating ice are encountered. Lake Erie, more shallow than the others sometimes is frozen over entirely, largely dependent on the season. The Detroit River and Lake St. Clair are usually frozen over. Lake Ontario, ordinarily has a sheen of ice on its surface.

These great inland oceans present a beautiful sight to the eye. The great white sheets, stretching as far as the eye can reach look not unlike the handiwork of some kindly giant who in his might spread a path for mortals to sport on.

But only in the coldest of seasons is lake navigation completely stopped. Lake Michigan has one line of passenger and freight ships making trips from Chicago, up the lake shore to Milwaukee, sometimes every other day and sometimes twice a week and sometimes not at all. These vessels, as may be imagined, are of the most sturdy construction in order to buck the ice floes and if need arise, to break through a field of ice. The Arizona, of the Goodrich Line, has been making the run for many years. The operators who have served on her relate many experiences that could easily have taken place in Russia or Greenland, but not America. The Chicago static room is regaled with these stories every year. Not long ago the Arizona, bound for Chicago, buffeted by a stiff wind and freezing weather, tried to make the entrance to Chicago harbor for a day and a half, and had to finally give up and turn her nose back to Milwaukee. Sometimes the ship on this run comes in with ice so thick that before the gangways can be let down, the ice has to be chopped off with axes by men on shore. The wireless room is supplied with a large radiator, the butt of jests during the summer months.

The Ann Arbor Railroad runs its car ferries from Frankfort to Manitowac and from Frankfort to Manistique as long as possible. Sometimes these ships run all winter and more often they have to be taken off the run when the ice is too thick. The car ferries ferry freight across the lake from one port to another. Other than these two lines of ships, Lake Michigan is innocent of any traffic from December 15 to April 15. Navigation on Lake Superior is out of the question and little or none is done on Lake Huron, Attempts are made on Erie, however. The good ship Ashtabula, a car ferry, between Ashtabula and Port Burwell, Ontario, has for several winters made the cross-lake journey without interruption. Freighted down with a load of freight cars and with bow and stern alike coated with ice, the ship has often pulled into her port almost unrecognizable. It is a hardy mariner, indeed, who sails the seas (or lakes) in winter.

Wireless is indeed of value to these vessels who brave the perils of the angry waters and the menace of floating ice in the cold season. More than once have calls for assistance been sent from these vessels when it seemed that the ship was tied up for good in a sea of floating ice, or frozen in an ice-pack. During the winter, most of the stations are closed. Operators used to be maintained at the old WGO station all winter for the benefit of the vessels in commission. Cleveland and VBF (Port Burwell) were open in Lake Erie. With the passing of the stations into navy control, one operator is kept on duty in each station listening. The WGO station has been replaced by the Naval station at NAJ, which handles all commercial traffic that Chicago did, and the Naval business as well.

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AMATEUR RADIO STATIONS

The ban has not yet been lifted on the operation of amateur radio stations. The government radio authorities advise that those who desire to install amateur stations may now make application to the district radio inspectors, and that when the ban is lifted these applications will be given attention in the order received.

BATTLESHIP HOUSEKEEPING

On one of the big American battleships 1,400 loaves of bread are baked every day. The laundry washes 4,000 garments belonging to the enlisted men. There is a separate laundry for the officers.

OVER THE TELEPHONE

"Hello! Thatchoo Kit?" "Sure. Slil, ain't it?" "Betcharlife ! Whenja gitback ?" "Smorning, whenjoo?" "Lilwilago. Javvagoodtime?" "Uh-huh." "Wherja gokit?" "Sconsun, Werjoo?" "Mishgun, jevver go?" "Javvanyfun?" "Uh-huh. Lots. Wenre yuh cummin over?" "Safnoon." "Srite1 Well, slong." "Slong."

CIGARETTES AND FIRES

The United States smokes 3,000 miles of cigarettes every day. Fires caused by cigarette stumps last year destroyed \$8,588,375 of property.

A DISTINCTION.

Teacher—Do you know that George Washington never told a lie? Boy—No, sir; I only heard it.

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NOTICE

The card record of employees is being revised and brought up to date, and it is important that any recent change of address should be reported to Mr. M. H. Payne at head office.

RETURN OF HIGH POWER STATIONS

The Navy Department has released the high-power stations at Belmar and Chatham and they are now being made ready for public service.

"There's no time like the present," said the opportunist sagely.

"There's no time but the present," said the other chap more sagely.

SALARY INCREASES FOR AMER. ICAN WIRELESS OPERATORS.

The special wage commission authorized by United States Shipping Board unanimously reached the decision that salaries to be paid wireless operators on vessels operated from Atlantic and Gulf ports, effective January 1, 1919, will be as follows: All chief operators, \$110; all assistant operators, \$85. There are to he no trans-Atlantic or coastwise bonuses and no sliding scales.

RADIO RELIEVES CABLE CON-GESTION

Postmaster General Burleson on January 4 issued an order to relieve cable congestion by routing a large number of government messages over the wireless to Europe. The order has been supplemented by a request to Secretaries Baker and Daniels to instruct military and naval officers abroad to observe this order in the routing of messages, the purpose being to relieve the strain upon the cables in both directions and facilitate cable service to the utmost.

PERSONAL

Lewis B. Stewart, yeoman, U. S. N., when last heard from was spending his furlough and money in Paris.

A. H. Rau, engineer, has resigned to engage in another branch of his profession. We wish him a large measure of success.

Alex E. Reoch, engineer, is in Buenos Aires supervising the erection of the high-power station for the direct New York service.

GEMS OF THE SCHOOLROOM

Let the doubters deny that there is humor in the schoolroom—read these and laugh. They were found in recent examination papers of youthful aspirants to educational distinction.

"Horsepower is the distance one horse can carry a pound of water in one hour." "The earth is an ablative tabloid." "To kill a butterfly you pinch its borax." "The Pope always lives in a Vacuum."

Also these: "A deacon is the lowest form of a Christian," and a "short circuit is a preacher on the circus who is short."

One child stated that Tennyson wrote a poem called "Grave's Energy," and added the startling news that "Queen Elizabeth rode a white horse into Coventry with nothing on, and Raleigh offered her his cloak."

Among the answers to questions at a school examination appeared the following: "Gross ignorance is one hundred and forty-four times as bad as just ordinary ignorance." "Anchorite is an oldfashioned hermit sort of a fellow who has anchored himself to one place." "The liver is an infernal organ." "Vacuum is nothing with the air sucked out of it put up in a pickle bottle—it is very hard to get."



January 1, at Free Synagogue House, New York, by Rev. Dr. Goldstein, Rose S. Superior, daughter of Mrs. Blumie Superior, to Maurice Berger of the Engineering Department, Aldene.

EXECUTIVE OFFICE

Mr. Sarnoff has returned from a business trip to Washington.

Mrs. Podell has resigned from the Comptroller's Department.

Superintendent Henderson of the Gulf Division was a recent visitor.

Mr. Nally, who is in Paris, is expected home early in March.

EASTERN DIVISION

NEW YORK

The great influx of applicants at the Broad Street office has brought about the induction of a new system with the object of dealing justice to every man.

One of the bulletin boards is arranged with numerous pegs upon which a small card for each applicant is hung in a designated position. There are eight columns, the first being for operators already in our service. These are men who were relieved from ships upon which Canadián, Belgian or naval operators were substituted, or where a ship has been indefinitely laid up. These men being already employed and insured by the company are naturally assigned first.

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The second column is for men who left the Marconi service to join the colors. It is fitting that these men should be taken care of and will be as fast as it is possible. The next column is for trained men with satisfactory records of previous commercial experience, so that the high standard of the Marconi service may be kept up. Following this is a column for graduates of the Marconi Institute who have, in addition to their technical and telegraph training, received instructions in the handling and abtracting of traffic, as well as in the Marconi and international regulations.

Then there is a column for discharged naval or army men who have had previous commercial experience, and next one for discharged service men who have not. The next is for former Marconi operators who resigned for reasons other than to join the colors and who are returning, now that the salary has been increased to such a high figure. The eighth is for all other applicants.

This board is conspicuously placed and it is the intention to use the first available man at each assignment.

Edward Carr Stephens arrived from a long South American voyage on the Dawnlite and brought with him an assortment of valuable souvenirs. Mrs. Stephens, a very delightful young lady, came to New York to greet him and they have taken apartments in the city. At the present writing Mr. Stephens has been confined to his bed for several days and his doctor feels that it will be another week before he is able to sit up. His many friends hope to see him well, and in his usual happy mood, within a very short time.

An excellent wireless record is held by Mr. Stephens, who figured in two German submarine attacks during the war. He was on the Montana when that ship was torpedoed and sunk, and was later on the Santa Rita when attacked. The Santa Rita managed to escape through the assistance brought to her through Stephens' cool wireless work.

Another noted arrival during the month was that of Alfred 'S. Cresse, who got back from a three months' trip on the Belgian relief steamer Dicto. The voyage was to Holland, and they also stopped at Norway and England. The ship is Norwegian and Cresse says they served fish three times a day. Now after so much fish he is hungering for some good Jersey chicken. We wonder just what old "AC" means.

Charles D. Guthrie, the local U. S. government radio inspector, who issues all licenses in this section, was a visitor at this office during the month. Perhaps there is no better known radio man around New York than Mr. Guthrie, for every wireless man here must see him at the start, and every two years after while holding a license. He is a former Marconi man in the inspection department and was some time ago an operator on coastwise ships.

Thomas Bowen, who resigned some time ago to enter the Royal Flying Corps of Canada, has returned and was employed for the Gulf Division as operator on the San Cristobal.

J. R. Schricker, who has a girl who writes to him from the South every day, was assigned as junior on the City of Atlanta, while R. Y. Sanford, the ship's junior, laid off, and later while M. P. Beckvold, the senior, had a vacation. He is now on the waiting list, in class A on the new bulletin board system.

L. D. Tabler, a recent graduate of the Institute, sailed as junior on the Trontoline and is now on his way to Holland.

BOSTON

Constructor Swett equipped the Matoa with a type C296-B set, and R. W. Rice,

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after a long term of adventurous service, is considering retiring for a much needed vacation.

E. W. Vogel, the hero of the Carolina, who has been on the North Star, has returned to New York. Vogel missed his calling—he should have been a sky pilot,

Operators Dodge and Valente returned to Boston from Norfolk when the Minnesota's crew was reduced. The former gentleman has dodged from the radio room to the signal deck on the average of once a month recently.

We have recently been renewing old acquaintances; regular old home week. A bunch of old timers who went into service have returned and dropped in to see how it is with us.

Ted Barber is marking time and counting the days against the City of Bangor's return to service.

The Yarmouth line bids fair to be as popular with the ops as of yore. If Philbrook stays with the Shipping Board he will be obliged to chase up passes to Yarmouth occasionally, although we do not think he would hedge at the mere trifle of paying his fare to go Down East.

Will someone please explain the form Mr. Gardner's activities have taken since we last saw him? No one seems to have discovered the proposed garage. Much interest is centered in just what sort of enterprise he is promoting.

GREAT LAKES DIVISION

CLEVELAND

We have been receiving many letters from Great Lakes operators who are assigned to vessels in other divisions, inquiring as to the date on which navigation will open this year. The prediction of the Great Lakes vessel owner is that the season will be later than usual. This is brought about by the mild weather which has prevailed throughout the Great Lakes Division up to the present time. There has been very little or no real winter weather and there is practically no ice in any of the Lakes. The numerous coal piles in the Lake Superior District have been practically untouched. as there has been very little demand for fuel. The ore docks in the Lake Erie District are loaded to capacity. There has been very little demand for ore, owing to the industrial slump which has prevailed throughout the country for the past ninety days, particularly in the iron and steel trade. With no early cargoes in ore or coal in sight, there remains only grain cargoes for early dispatch. It is figured that this trade will be pretty well taken care of by the Wild Carriers. It is expected, however, that all vessels will resume service not later than April 15th. The passenger vessels will resume service at their usual time, which is early in the month of March.

The car ferry Ashtabula, with Wm. H. Jones, and the car ferry Maitland No. 1, with Otto Berg, are still in service. If present weather conditions continue they will have an all winter's job.

CHICAGO

L. Schermerhorn is still on the Alabama.

Elmer Prenzel is holding down the Indiana. He recently paid a visit to his home town, Sheboygan, Wis., and says that the trip was a success and that "she" is some girl. J. O'Neal relieved Opr. Prenzel during his absence.

It afforded us much pleasure to be favored with a call from Supt. Henderson of the Gulf Division recently.

We have received a card from Opr. S. K. Culbertson, formerly aboard the S. S. Harvester. He is in France with the Signal Corps and seems to like it fine.

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GULF DIVISION

We are glad to report that this Division is rapidly nearing the reorganization goal. Regardless of the fact that a great many of the old timers were released to government service they still report at the Division headquarters every trip upon their arrival.

The new wage scale is looked upon by the operators of this Division as one of the best New Year's presents ever received. They are rapidly accustoming themselves to the figures on their semimonthly checks which are in some cases double what they previously received.

P. E. Cassells has returned to the Parrott as operator and purser.

L. L. McCabe, our former Division Inspector, is at present assigned to the Chalmetts. M. O. Green, an old Marconi employee, is his junior.

J. A. Dillon has been assigned to the English vessel Huronian for one trip.

S. C. Hymel, an old employee, is on sick leave.

J. E. Kane has been transferred to the Miami as senior. P. R. Ellsworth is junior.

J. E. Broussard, our Traveling Inspector, is returning to New Orleans, having finally separated from lis old sweetheart, the Excelsior. We understand the Excelsior will be laid up in New York for the next sixty days undergoing repairs.

T. Bowen, an old employee, has been assigned to the San Cristobal, operated by the English Company.

The installation on the San Bernardo has finally been completed and turned out, and this vessel sailed from Mobile for Tuxpan on January 29th with Operator G. H. Gault in charge.

Our superintendent returned February 1st from a three weeks' trip, which included New York, Boston, Cleveland and Chicago.

PACIFIC DIVISION

Operator E. R. Fairley, formerly of the C. A. Smith, is now in charge of the plant aboard the steamer Hermosa, plying between San Pedro and Avalon, vice H. L. Johnson, resigned.

Operator R. S. Williams, junior on the Klamath, was given a week's vacation to recuperate. He is again on the job.

R. S. Palmer, after a month's stay at our Seattle shop, has returned to his old job on the Yosemite. Palmer was in charge of our Seattle shop during Mr. Barker's vacation.

H. A. Burgess was temporarily on the Yosemite during Palmer's absence.

Operators J. W. Yeager and E. W. Thurston have been enjoying a three weeks' vacation during the layup of the President.

Operators C. G. Ahern and L. A. Peek are acting senior and junior on the Governor. The Governor was recently given a layup and these men had an enjoyable two or three weeks' vacation. Vacations appear to be starting early this year.

B. D. Frank has replaced A. D. Mair as junior operator on the Willamette. Frank recently entered our service.

The old boys are beginning to return to the service. Today we are having the pleasure of reinstating W. P. Giambruno as operator in charge of the Col. E. L. Drake. We have received letters from several others who expect to be released in the near future from the Army and Navy.

One of the old staff, Mr. C. A. R. Liudh, was recently married to Miss Zella Turner of Tacoma, Wash., at New York, by Rev. Harmon of the Y. M. C. A. overseas service. The ceremony was very simple and only immediate friends were present.

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World Radio History

Marconi Wireless Telegraph Company of America

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