

MARCONI SERVICE NEWS

Vol. 2. No. 1



January, 1917

Published at 288 D'way, New York

By and for Marconi Employees

A Happy New Year!

INSPIRED by the knowledge that we are starting off on a new year—together—I wish to extend to you my best wishes that it may be for you, individually, a happy one, and in this greeting is included every employee in the Marconi service, no matter where he may be, or how humble his task.

Your loyal support has been, and is, a splendid incentive. No one can appreciate more than I, that the very substantial progress of our company in the twelve months past, is a cooperative achievement, and it is because of the faithfulness and loyalty of the individual employee, everywhere, that such gratifying results have been accomplished.

There is much to be completed, and much more to be created. I feel sure that the men who will evolve the new things are now in our service, among the loyal supporters whom I visualize as the circle which encompasses the Marconi trademark,—a symbol of infinity of effort and accomplishment banded about with our company's honored name.

It shall never be said that in this corporation the human unit has no chance of commanding attention, that individuality is merged in the mass. Opportunities are what the individual makes them, and any time, one may be called from that supporting circle to a place beside the executive standard, where special ability will always be welcomed and recognized.

With all good wishes for a happy and prosperous new year,
Cordially,

Vice President and General Manager.

Special Prices to Marconi Employees

Books on Wireless

A list of some of the best books pertaining to the wireless art. We have made arrangements whereby we can supply you with any book on wireless published in America at regular published price. We can also import on order any book published abroad. Send us your orders. They will receive prompt attention.

YEAR BOOK OF WIRELESS TELEGRAPHY (1916) pp. 1000. Contains a yearly record of the progress of wireless telegraphy; complete list of ship and shore stations throughout the world, their call letters, wave-lengths, range and hours of service, and articles by the greatest authorities on vital questions.....	\$1.50	\$1.00
HOW TO PASS U. S. GOV. WIRELESS EXAMINATION. 118 Actual Questions Answered. 72 pp. E. E. Bucher. The greatest wireless book ever published for amateurs and prospective wireless operators.....	.50	.40
HOW TO CONDUCT A RADIO CLUB, pp. 128, 116 illustrations. E. E. Bucher. Describing Parliamentary Procedure indoor and outdoor experiments. Receiving Set and many other features.....	.50	.40
LIST OF RADIO STATIONS OF THE WORLD, 220 pp. Compiled by F. A. Hart, Chief Inspector of Marconi Wireless Telegraphs Company of Am., and H. M. Short, Resident Inspector U. S. A. Marconi International Marine Com. Co. The only complete authoritative call list published...	.50	.40
HAND BOOK OF TECHNICAL INSTRUCTIONS FOR WIRELESS TELEGRAPHERS, pp. 295. Hawkhead, J. S. Covering principally the practice of the Marconi Co. abroad and elementary explanation of the underlying principles	1.50	1.00
TEXT BOOK ON WIRELESS TELEGRAPHY, pp. 352. Stanley, R. A. text book covering the elements of electricity and magnetism, with details of the very latest practice in wireless telegraphy in European countries—recommended to all workers in the art of radio telegraphy.....	2.25	2.00
PRACTICAL USES OF THE WAVEMETER IN WIRELESS TELEGRAPHY. Mauborgne, J. O. Originally compiled for the Officers of the U. S. Signal Corps; comprises an explanation of the use of the wavemeter, the most complete publication on the subject so far produced.....	1.00	1.00
THE WIRELESS TELEGRAPHERS' POCKETBOOK OF NOTES, FORMULAE AND CALCULATIONS, pp. 347. Dr. J. A. Fleming. Bound in full flexible, rich blue leather, stamped in gold, with round corners and gold edges. A book of practical working formulae and calculations for the student of radio telegraphy. Bound to be considered an indispensable part of the working equipment of every wireless student.....	1.50	1.00
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THE WIRELESS AGE. This is essentially YOUR magazine. You can help to make it more interesting and more widely known by introducing it on every opportunity to new readers. Your special rate will apply on NEW subscriptions secured by you at full price \$1.50, you keeping the commission of 50 cents. Obviously EVERY Marconi employee should read the Wireless Age. Net to you.....	1.00	1.00

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LIFE AT THE KAHUKU HIGH POWER STATION

As Viewed by W. A. WINTERBOTTOM

TO the average Marconi wireless operator, Kahuku and Koko Head are vaguely known as sites of trans-pacific high power stations. The exact locations are somewhat hazy, and little is known of the life enjoyed by the Marconi men stationed there.

It is the general impression that both Kahuku and Koko Head are somewhere near the city of Honolulu, whereas Koko Head is within twelve miles of the city, but Kahuku, where for the present our entire staff is located, is found on the other side of the island of Oahu, some eighty miles by railroad, and forty-six by direct automobile road.

The trip from Honolulu to Kahuku, which is usually made by automobile or motorcycle, is quite interesting. The road is particularly good, and the entire journey takes about two hours. The road runs through crany miles of sugar plantations and pineapple fields, always green and under constant cultivation.

Honolulu is situated on the lee side of the island and during the midday hours is often uncomfortably oppressive. But once the wide range of hills dividing the island has been crossed an immediate change in the temperature is noted, and upon arriving at Kahuku there is a strong, steady and most welcome breeze right off the ocean which is found most refreshing.

Situated within a stone's throw of the beach the Kahuku station is ideally located from the point of health and comfort. Quite a large staff is housed in the Marconi Hotel, some operators and some engineers. Sel-

dom does one find such a sturdy, healthy and genial lot. Chief Engineer Rau, one of the most promising young men, has been complimented not only by his employers, but by the chief engineers of the Japanese government wireless service. And he has merited it; sixteen hours a day has been his steady diet for a year or more.

The Kahuku station differs from the other high power stations in the matter of power generation. The usual practice is to tap on to some electric supply service, but at K I E three large steam boilers, fired by oil, operate two 500 h.p. turbine generators. This requires the services of special turbine engineers, and one of the best is George Stepp, who came to us from the Turbine Palace of the Pacific—the Great Northern. Eklund and Hackenburg also take shifts in the steam department, one of the most modern and complete steam-electric plants built. Stepp not only knows the steam turbine game from A to Z, but knows as well how to get results with the least expenditure of time and money. His constant aim is greater efficiency.

Over in the electrical department are Graff and Harvey, acting as shift engineers. In this work Chief Engineer Rau also takes a turn. Graff has had considerable experience at the California stations and he has been a valuable assistant to the Chief. Young Harvey, apart from trying, rather painfully, to smash plate glass insulation with his bare fist, is a careful fellow, industrious, and of much promise.

In the operating house we find

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Gompf acting as traffic supervisor, a new position which he is handling with much credit. Under his care are operators Anderson, Allen, Lynch and Smith. They are all first class men of whom the Company is proud, and their future looks extremely bright. Anderson is the man who "opened" the Japan circuit, and on this particular morning he handled some 5,000 words in the finest fashion. Allen is a comparatively new man at the station, and he contemplates taking a college course shortly. He hopes to re-enter our service later and we shall be glad to welcome him. Lynch recently arrived from Marshall, where he had made an enviable reputation for himself. Smith is well known as one of the best marine operators on the Pacific; he had grown fond of the Honolulu trip on the Matsonia but his ability required that he assume more important duties in the high power service.

When off duty these happy fellows enjoy life to the full. Seldom a day passes but what a party from four to six skip over the hill into the surf for a swim. And they are some swimmers! Anderson, they say, was born in the South Seas and has been swimming ever since. Stepp, Eklund and Gompf, however, are ready at any time to give Anderson a race.

After a swim and a shower there is usually a game of tennis before dinner. Here the honors are usually divided between Stepp and Graff, although Rau and Anderson help to make the game interesting.

To keep in the best of trim, Engineer Stepp has constructed an outdoor gymnasium, complete with flying rings, trapezes, horizontal bars and other apparatus, and judging by the condition of his colleagues, this is quite a popular feature.

Dinner usually finds seven or eight of the boys ready for the good things

served up by the excellent Chinese cook. The meals served at this hotel are as fine as any served in the City of Honolulu.

Usually, after dinner one of the boys starts up the pianola, or possibly the Victrola. Three or four others take up cues in a pool or billiard match. Others will pick a quiet corner and an easy chair, fill up the old briar and delve into the Marconi library for an hour or two. Quite a number of other games are indulged in, such as whist, checkers and dominoes.

Hearing a motorcycle rush by the hotel window, about then, we inquired and learned that one of boys was off to the village, some three miles distant, to bring back the evening mail. There are two mails a day each way, and everybody is interested when Harvey returns fifteen minutes later with the mail bag. It is a signal, and jokes about certain school-ma'ms and others fly thick and fast.

At the week-end there is usually a little lull, and the boys off duty make for the city or some nearby resort. Most of the staff own either motorcycles or cycles so these trips are usually made by motor. The trip to the city by motorcycle is made in one hour and a half.

Anderson boasts an automobile which, so they say, once made the trip to Honolulu—forty-six miles—in one hour flat. It is mostly engine, but two bucket seats and a nitty golf-loaf gasoline drum are cradled on the back to hold it to the ground.

On the whole, life at the station is very attractive; each man has his own room, comfortably furnished, and the house laundress takes care of his linen for two dollars per month. The Marconi Social Club of Kahuku was recently formed and monthly dances and other entertainments are promised in the near future.

THE
MELTING POT

Wherein A Fusion of Human Elements is Effected by DAVID SARNOFF

This is the time of the year when BALANCE SHEETS are made up and studied.

Let us not be unmindful of OURSELVES; for around each of us there is an individual little world.

We are all in business; we are merchandising our TALENTS, ABILITIES and the like, meagre as these may be.

The best way to determine benefits from a BALANCE SHEET is to ANALYZE the items which comprise it.

By this method, the WEAK and the STRONG points become evident. In this way, campaigns are formed and plans executed.

But we must be ACCURATE in our ANALYSIS and base our deductions on LOGIC.

Shakespeare struck the keynote of self analysis when he said:

"THIS ABOVE ALL UNTO THINE SELF BE TRUE
AND THEN IT MUST FOLLOW AS NIGHT THE DAY
THOU CANST NOT BE FALSE TO ANY ONE."

SELF ANALYSIS is perhaps the greatest and most important STUDY of all.

It is the most useful to the individual; but, like everything else, it has its LIMITATIONS and PITFALLS.

To avoid these one must KNOW them.

Let me direct your attention to two PITFALLS.

One is SELF CONSCIOUSNESS; the other EGOTISM.

Men often become SELF CENTERED and SELF CONSCIOUS when scrutinizing themselves minutely.

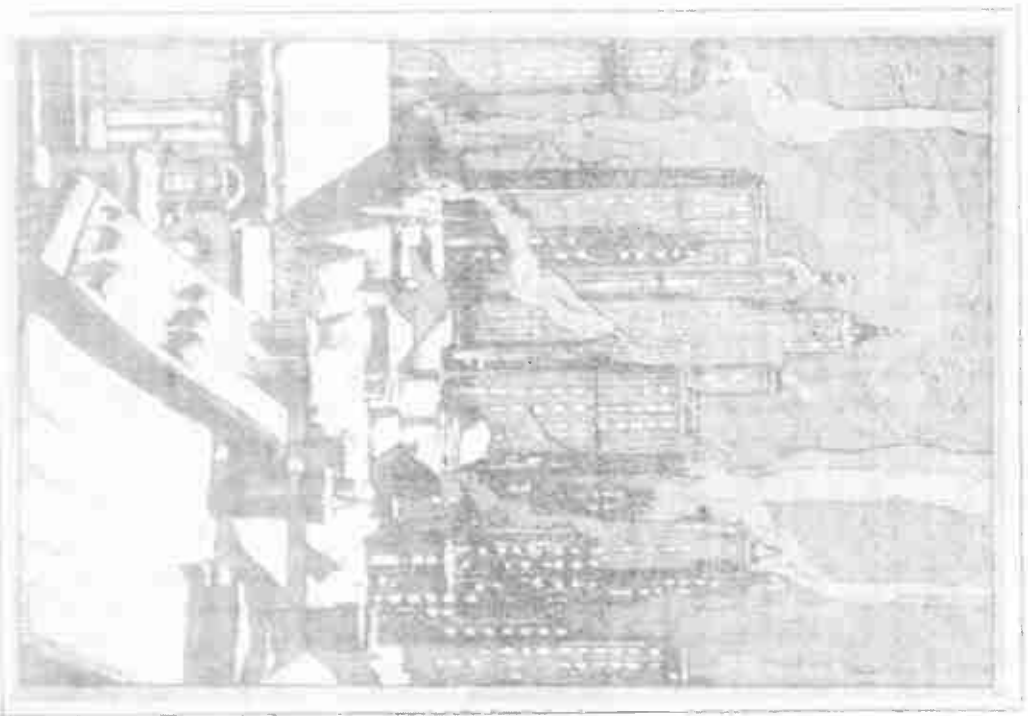
Others frequently reach the conclusion that they are in reality not receiving all due them, and thus form an EXAGGERATED APPRAISAL of themselves, and this spells EGOTISM.

To the extent that one can STRIKE the middle and sensible course; he derives BENEFIT from SELF ANALYSIS.

I do not wish in this note to suggest more than the need for the INVENTORY.

Take it NOW and be sure you "copy it all down."

When you have done this, let's begin next month to find a fusion of all our ideas through the medium of THE MELTING POT.



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BRASS TACKS. *DRIVEN BY C. J. ROSS*



TOMORROW

There's a city called Tomorrow somewhere up along the road,
Where you hope that kindly fortune all your burden will unload;
Mystic city of contentment, trouble cannot enter there,
And the gates are closed forever to the devil's want and care.
As you pass the yearly mile-stone on the road along the way,
Can you say you've been a credit to the village called Today?

Look around you in the village—there's the silvery morning light,
Where the miracle of sunrise has dissolved the inky night;
You can hear the ringing laughter of the happy people there,
You can hear the sobs and weeping of others in despair,
Watch efficient men who flourish as they force the right of way,
Note the idlers and the weaklings as they wither and decay.

On the threshold of the New Year pause a moment, friend, and think,
Through Today there runs a river, you are standing on the brink,
Where a vessel's primed for sailing to that city far away;
And each makes out his passport when he's booked to leave Today. . . .
All the passports are collected, read and censored with great care,
You can't bank on kindly fortune for an unearned welcome there.

There is only one solution—Let your banner be unfurled,
Join the serried ranks of workers, blast your way on through the world;
And that Gain and Peace you're seeking, which oft-times to you does seem
To avoid your grasp and vanish like a dim and distant dream,
Will be yours. . . . Become the master, think and work, don't shirk and fear.
Show the Great Almighty Power that you're thankful for this year.

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"THOUGH HUNDREDS OF MILES AWAY"

South Wellfleet, Mass., Dec. 6th, 1916.

Mr. E. J. Nally,

Dear Sir,

Although it is a little early to write you, still while the opportunity is at hand, I wish to extend to you the season's greetings, and sincerely trust that you will have a very Merry Christmas.

I have been here one year now, and like the place more and more each day. Everything is satisfactory, and I am absolutely content in every manner. The Company certainly is kind to its men, and words seem to fail to indicate my extreme appreciation.

Most important of all, I hope that you, and the Company, are satisfied with my work, and will not hesitate to let me know if at any time there is any thing more I can do for the Marconi Company, or its interest.

Very sincerely yours,

Irving Vermilya, Manager.

December 20, 1916.

Mr. Irving Vermilya,

Manager, Marconi Station,

South Wellfleet, Mass.

Dear Mr. Vermilya:—

Please accept my thanks for your letter extending the greetings of the Christmas season. It is a source of considerable satisfaction to me to know, as your communication indicates, that although the activities in which the men of the Marconi Service are engaged, may keep them hundreds of miles away from the executive offices, I am still able to continue in touch with them and to feel that their spirit of co-operation is as strong as though they were here.

At this, the Yule-Tide season, when kindly thoughts and good cheer prevail, it is also gratifying to learn that there is realization among those in the Marconi service that this Company has a keen appreciation of loyalty and efficiency and has shown it by careful regard for the welfare of its employees. Your expression of happiness in your work and willingness to bend every effort to aid in maintaining the Marconi ideal of efficiency is a valued tribute to the policy of the Company.

With Best Wishes for a Happy Christmas, I am,

Sincerely yours,

E. J. NALLY.

Vice-President & General Manager.

Advice on Abstracting

Conducted by

C. F. Krauter

Operators are cordially invited to direct questions to this official department, which is designed to clear up all points pertaining to the making up of abstracts. Questions on technical matters will not be answered. The Operator's name and division must accompany each inquiry, but will not be printed.

A New Year again; undoubtedly another year of accomplishments. I trust you have all been as happy as I have in overcoming difficulties and straightening out traffic tangles in these pages. We have reason to be proud of the establishment of an esprit de corps and should feel encouraged to strive continually as one individual to achieve success for the group as a whole. Here's for a Happy New Year.
—C.F.K.

J. E. K.—Mr. A., aboard the S.S.—sends a message ashore to Miss B, prepaying a reply to the extent of \$3.00. The message is delivered locally by Coast Station Manager C.

Ship Operator D claims that Manager C on shore should make out an R.P. voucher in favor of Miss B, in the amount of \$2.00 and deliver it to Miss B with the message.

Manager C and his staff insist that Operator D should give the voucher to the sender of the original message, Mr. A.

Which is the correct method of procedure?

Ans.—Operator D is correct. Miss B will use the R.P. voucher as payment for the answer. Manager C must turn in the voucher with his traffic report to offset his R.P. charge. If Miss B so desired, she could file her reply via any other Marconi station, and hand the voucher to the operator as payment.

Do not get mixed with messages put on the wire by Manager C, because in that case the Western Union

operator would issue the voucher. The September issue dealt rather extensively with R.P. messages.

M.M.—Should our regular receipts be given for an R.P. voucher, the same as for cash?

Ans.—Yes. Cross out the wording "the sum of" and enter the wording "R.P. voucher, number so and so."

Note.—The St. Jean is now operated by Cie Navale de l'Océanie, 77 Rue de Lille a Paris.

Ed.—What company operates the Arrino and Tatarax?

Ans.—Seimens Bros.

A.LaF.—What account is debited and credited on traffic via coast stations in Spain?

Ans.—Spanish Government.

Note.—Some of the boys tear up their cancelled message copies. This should not be done. Every message taken in must accompany your traffic report. We often have to refer to cancelled copies of messages in order to adjust a complaint.

J.H.J.—Who operates the Amolco?

Ans.—Crowell and Thurlow, Bos-

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ton, Mass.

D.S.—If one of our ship stations gave an MSG for delivery ashore, to an affiliated ship lying in port (for instance in Mexico), would there be any tolls due the affiliated company?

Ans.—No, provided there was no other line charge, in which case they would bill us for delivery charges only.

E. H. M.—An ocean letter is routed as follows: Marconi coast station to Marconi ship, to be mailed in port. What is the five cent postage charge credited to, on the coast station abstract?

Ans.—American Marconi Co's Ship Stations, in Column No. 16, together with the ship's tax. The ship will credit "This station's proportion" and "Registration" respectively.

Note:—Canal business forwarded via Colon and Balboa must be prefixed "C.B."; all operators do not do this, however. Refer to Special Order No. 26 and be governed accordingly.

K.R.—Column No. 21 on the received side of ship station abstracts is the only column that we may use for such tolls as R.P., Registration, etc. How should the column be headed; provided different classes of tolls are entered in the same column?

Ans.—Miscellaneous.

B.O.S.—Does the ship's tax of U. S. Government vessels vary between four and eight cents, depending on the service in which the ship is engaged, or is it four cents at all times?

Ans.—The following, from letters received on the subject:

U. S. Army Transports . . . the rate is four cents per word, regardless of the position of the Transport.

U. S. Coast Guard Service . . . the Coast Guard Cutter Ship tax is four cents per word at all times, (excluding the Great Lakes), no matter

whether the cutter is on a coastal or transoceanic voyage.

U. S. Navy Department. . . the radio rate of United States Naval vessels is four (4) cents per word, regardless of direction of voyage.

Note:—Time and again the Herman Frasch is shown on coast station abstracts as being operated by the Union Sulphur Company; this ship is operated by the Atlantic Communication Company.

INCREASE IN MARINE OPERATORS' WAGE SCHEDULE

The Traffic Department announces that, effective January 1st, 1917, the following wage schedule for marine operators will be put into effect throughout the entire organization:

	Per Mo.
Commencing salary	\$30.00
After six months' service	32.50
After one year' service	35.00
After one year & 6 mo.	37.50
After two years' service	40.00
After three years' service	45.00
After four years' service	50.00
After five years' service	55.00
After six years' service	60.00

(Maximum)

All operators who are receiving \$25.00 per month on January 1st, 1917, when the new schedule is put into effect, are to be increased on that date to \$30.00 per month, they will then be required to wait six months before they will receive their next increase, which will be July 1st, 1917, when they will be increased to \$32.50. Thereafter regular increases will be given semi-annually or annually, in accordance with the schedule given above.

Operators receiving \$30.00 or over on January 1, 1917, are not to be affected in any way, but will continue to receive their regular increases as they fall due, as per schedule.

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THE RADIO PROVIDENT CLUB—1916

"Thrift is not a virtue of tomorrow, but of today. The young man who puts off until he is earning a larger income or has satisfied some present want, or for any other reason, the effort to spare and accumulate is pretty sure never to begin, unless under the pressure of misfortune. And it is really true that only the beginning is difficult."—J. J. Hill.

The following is the final statement of accounts of the Radio Provident Club, for the fifty weeks ending November 25, 1916:

Total number of memberships	429		
Total Deposits			\$7,593.50
Withdrawals during the year	154	\$1,296.00	
Delinquent memberships	38 192	372.50	1,668.50
Remaining memberships and fund	237		\$5,925.00
Interest earned			222.78
Total of fund, November 25th			\$6,147.78
Value per share, distributed in cash			\$ 25.94
Amount deposited, per share			25.00
Net profit, per share			\$.94

The Club will be continued during the coming year, and the plan under which it will operate will be the same as heretofore.

Weekly payments to begin with the week ending December 16th, 1916, should be remitted to M. H. Payne, Trustee, Geo. M. Hayes, or J. B. Duffy, authorized collectors, the investment of which will be in the hands of a committee whose names are affixed hereto.

Following is a comparative statement of the operations of the Club for the three years of its existence.

	1914	1915	1916
Total memberships	392	310	429
Total deposits	\$3,760.66	\$5,305.50	\$7,593.50
Withdrawing and delinquent members	285	180	192
Amount withdrawn and delinquent	2,032.16	2,055.50	1,668.50
Remaining members	107	130	237
Remaining Fund	2,728.50	3,250.00	5,925.00
Interest earned	104.86	143.00	222.78
Net profit per share	.98	1.10	.94

Respectfully submitted,

DAVID SARNOFF, Chairman

M. H. PAYNE, Trustee

C. J. ROSS

G. W. HAYES

J. B. DUFFY

E. B. PILLSBURY

Committee.

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WE'LL TWINE A WREATH



*Memorial to operators lost at sea,
Battery Park, New York*

We'll twine a wreath in the morning
hours
When Maytime zephyrs blow,
A chaplet of starry springtime flowers
For the lads who are lying low.

In the wreath we make, the vine and
and rose
We will deftly weave between,
The names of the men that the ser-
vice knows,
To keep their memories green.

We'll hang our wreath on the foun-
tain there,
Where crowds may gather to weep
For the boys who feared not to do
and dare,
Till their ships went down in the
deep.

And every year we will come again
To their monument near the sea,
And bring our wreaths for the wire-
less men—
The lads who served at the key.

—Benjamin Beckerman,
Operator S.S. Hamilton.

FREE LIBRARY FOR MARCONI OPERATORS

Further consideration of the com-
fort and welfare of marine operators
is revealed in the announcement just
made from the Head Office that all

operators reporting to New York may
have full privileges of the free library
maintained by the Company in the
Woolworth Building. A selection of
books for reading during periods of
inactivity while at sea may be ob-
tained by applying to the librarian.

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MARCONI MEN ON THE WING

A Few Interesting Observations by E. B. PILLSBURY

IT'S a long, long way from Manhattan to Vancouver, over the majestic Canadian Rockies across eight states and four provinces; and a far cry thence to Alaska where Mr. Winterbottom and I reached our farthest North, and on to Hawaii our farthest South, and back home through California, over the Union Pacific. It takes but a moment to outline the route, but many weary miles to traverse it. We have encountered a variety of climates, and divers kinds of people as well as glaciers, icebergs, dog teams, active volcanos, strange fishes and birds, tropical flora, bewildering hula-hulas, unknown fruits, surf boards, and everywhere boundless hospitality. During five voyages on the much-dreaded Pacific, old Neptune was as placid as Long Island Sound; and two of these voyages were made on the Great Northern, one of the palaces of the Pacific unequaled for speed on the Atlantic and surpassing any ship of her size in American waters for luxurious fittings and perfect service. Messrs. Bryant and Wiese, the Marconi officers on board, made us feel right at home, and the same is true of every ship on which we sailed.

We left New York near the end of August, crossed the continent in sizzling weather without discomfort, and embarked at Vancouver on the Grand Trunk liner Prince George for Juneau, where we landed after a grand trip through the inside passage, which resembles a continuous performance on the lower half of the Hudson River. The Captain went out of his course to allow the passengers a close view of the great Taku glacier at sunset.

We found Juneau to be a modern

city of 7,000 built mainly on piles paved with timber, the buildings modern, many being of concrete construction. One of the office buildings is of seven-stories, equipped with an electric elevator in charge of a colored conductor wearing spotless white gloves. The streets are electric lighted and alive with motor cars. The mountains extend right down to tide-water, leaving but a narrow level stretch. The hotels would do credit to any moderate sized city, although the cost of food is abnormal. We found it warmer in Juneau than in Vancouver and did not wear overcoats during September. There were flowers everywhere, sweet peas being in many cases as high as twelve feet. Vegetables grow to unusual size. We were told that in mid-Summer it is at times too warm to work during the middle of the day owing to the in-shore sweep of the Japan current.

Manager Bence at Juneau is an able manager and is in charge of the erection of our new station building and steel tower, the latter being far up on the mountain side. He has an interesting family and an efficient staff consisting of Messrs. Manahan, Marthaler and Schneider, the last two named "batching" it on the mountain top. They invited us to remain for luncheon and prepared an excellent meal of ham and eggs with accessories, although in turning eggs Marthaler landed one of them on the floor.

Before leaving we called on the Governor who received us with much cordiality. On the lawn in front of the Capitol is an old cannon of Russian vintage.

We had an opportunity to go

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through a quartz mill and observe the process of separating gold from the rock, this particular mill yielding \$1000 per day in pure gold, the work being almost entirely automatic, the workmen merely watching the machinery.

We were also privileged to inspect a salmon cannery where the work is done mainly by machinery and we are through eating canned salmon forever! We saw in one of the streams, large salmon jumping over falls seven feet high to reach their spawning grounds. After spawning, they die, if not captured, by means of seines.

The Indian villages are interesting, being built in imitation of the white man's; and the Indian burial places are unique, being ornamented with curiously shaped and carved images of birds and fishes—and totem poles to represent families and tribes, some being fifty feet high. Some tribes enclose the corpse in a bag and hang it in a tree out of the reach of animals. We saw one so placed at Alert Bay. The Indians live by hunting, fishing, farming, making baskets and moccasins.

Ketchikan we found to be a town very similar to Juneau but considerably smaller, the shops in both towns being attractive to tourists. Manager Powell and his charming wife and infant daughter were most hospitable and we found his efficient staff to consist of Messrs. Lange, Svenson, Johnson and Wilhelm, all good men and true. The wireless station is so located as to be accessible only by water in the winter season and a good sized motor boat is a part of the equipment.

Wrangell resembles Ketchikan and is devoted solely to fishing. It has the most remarkable collection of totem poles in the territory.

(To be continued)

SOME SPEED RECORDS

ALTHOUGH the service between the United States and Japan was inaugurated only a short time ago, several speed records in sending and receiving messages, which prove wireless faster than existing cable practice, have already been made by operators in the trans-Pacific stations.

Operator "Paddy" Walsh of Honolulu recently sent to the Marconi receiving station in California, a distance of 2,372 miles, sixty-seven messages in one hour and twenty minutes. None of the messages was shorter than fifteen words and some of them contained forty words. W. H. Barsby, operator at the receiving station, copied the messages without a "break" or an error.

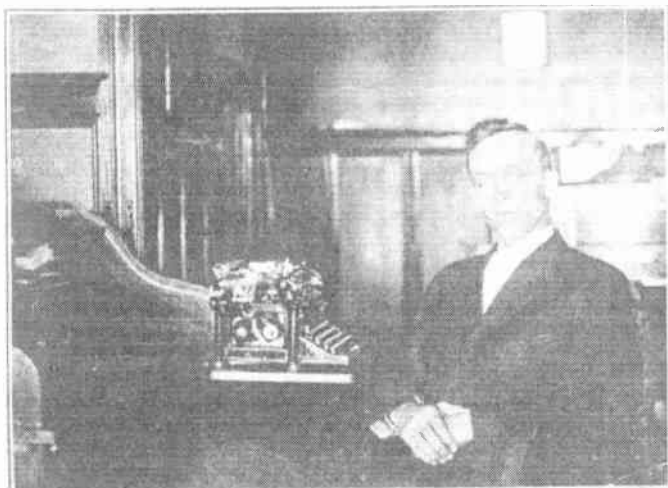
Operators in the Marconi office in the heart of the business section of Honolulu are today with the aid of repeaters transmitting direct to both the United States and Japan. Automatic transmission and reception of messages at a speed of from eighty to 100 words a minute will be brought into use in the near future.

W. A. Winterbottom, the new Division Superintendent, believes the 100-word a minute estimate is entirely too conservative; half again that speed can be obtained, he predicts.

Meanwhile, some wonderful performances at the key are being carried out. "I spent Thanksgiving eve and day with the boys at Marshall," says Mr. Winterbottom, "and witnessed Mr. Walsh, in Honolulu transmit fifty-seven Night Lettergrams direct to Mr. Barsby, without a break and without a correction, in fifty-nine minutes."

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DAILEY—MANAGER OF HATTERAS

JUST seven years and three months ago the present manager at Cape Hatteras station was its office boy. Richard B. Dailey came there at age nineteen from a clerkship in a wholesale grocery house in Elizabeth City, N. C., because as he expresses it, "from early boyhood I had been very anxious to study electricity, but my circumstances had debarred me." His entrance into the wireless field was the result of both determination and initiative; for while on a vacation he scraped up an acquaintance with the station's chief and talked himself into an opportunity to learn the mysteries of the station's operation. This was in United days, and R. J. Vosburgh and G. O. K. Kendrick, then assigned to the post, went to no end of trouble to instruct the boy who challenged their admiration by his

intensive efforts to master his subject.

The knowledge possessed by his tutors—one an electrical engineer and the other a premier telegrapher—was absorbed so intensively that Dailey was ready for a position nine months after his posting began. He secured the second trick for awhile, then was called to New York and assigned to sea service on the Larimer. A year later he entered the Revenue Cutter Service and within three months was rated as Chief Electrician.

Dailey returned to Hatteras—this time for the Marconi Company—on November 15, 1912. He was third trick operator for a year, was then assigned to second trick, and in October, 1915, was appointed manager of the station.

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Maintenance Matters

A Department for Technical Questions With Answers

By P. B. Collison

All employees are invited to direct technical questions to this department

IN looking over the station reports it appears that certain operators are not familiar with the proper names for different parts of a standard Marconi aerial.

I will therefore explain certain details of aerial construction.

The wire is made of seven strands of No. 18 B&S silicon bronze, twisted together in a cable. At the end of each wire is placed a hard rubber rod twenty-four inches long and three-quarters of an inch in diameter. A large galvanized eye in each end is provided for attaching it to the eyebolt in the spreader. The wire is brought through the eye and twisted around itself, the rod is fastened to an eyebolt with an S hook. The eyebolts pass through are held in place with a nut. The bridles consist of two pieces of hemp rope seven feet long with an eye spliced in each end. Spaced on this rope are two pieces of hard rubber tubing, the space between them and the rope being filled with sulphur. Each piece of rope thus prepared is termed a "strop insulator."

These bridles are fastened to the spreaders with shackles, the two sides of which are joined at the halyards with another shackle. The wire rope halyards extend from this junction through the pulley to the base of the mast.

These halyards are supplied and maintained by the steamship company, and should they require renewing, operators should so report to the steamship company, duplicating the information on the ship's log and on

the station report. Such reports should be made to the operating company in writing, and a duplicate turned in to the M.R.I. Department.

If the correct notation for certain parts of the apparatus are not understood by operators, they should give as complete description as is possible, forwarding it to this Department whereupon the necessary information will be forthcoming.

F.J.K. writes:—Last trip, when I put my storage batteries on charge the voltage decreased and they got very hot. What caused this?

Answer:—You were charging the batteries 'backwards', e.g., the current from the generator passed through the cells in the wrong direction. The easiest and best way to tell when you are charging the batteries right is to connect a voltmeter across the cells and note its reading in volts. When the charging current is applied the voltage should immediately rise. If the voltage decreases, open the circuit at once and reverse the polarity of the charging current. If you charge accumulators 'backwards' for any length of time you will ruin them.

A Few Hints on Station Reports

Please be definite. When ordering fuses state number, type and size. If you have any doubts we will help you out. If your Bradfield deck insulator leaks, tell us whether it is an electrical leak or whether water comes through. In the first case a new hard rubber tube is needed, and in the second a can of white lead. When ordering brushes for the motor

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or generator mention the make and size of the machine. If you wish to have your crystals replaced bring in the old ones and we will exchange them. If you do not remember to do this, be sure and state what type of tuner you are using.

With the type of station report now in use it should be very easy for operators to submit definite and neat reports. On the whole the reports are well written but a few have been received recently indicating little more than the name of the vessel.

The following is important:—Please leave your spare telephones where the Inspectors can test them. They are often at a loss to know whether you have one or two pair.

B.W. asks:—(a) Why is it that when I get a good note on the quenched gap and the ships rolls the note breaks up?

(b) Can you tell me what power Cape Cod uses when sending press and whether his aerial is directional east and west?

(c) Why is it that it is necessary to loosen the coupling between the primary and secondary of the oscillation transformer when using the synchronous rotary gap?

(d) What makes a spark jump across the safety gap of the transformer when using the synchronous rotary gap?

These questions all refer to the standard 2 k.w. panel sets.

Answer (a) If the motor generator is installed "athwartships" the rolling of the ship will cause the armature to be thrown against the end thrust bearings and its speed will be slightly reduced for the moment. Also, the armature is thrown slightly out of the magnetic field, thus reducing the voltage generated. It is this variation of speed and voltage which causes the note to change.

Answer (b) Cape Cod uses about

twenty kilowatts when sending press. The aerial is not of the directional type, but it seems to radiate most of its energy over the North Atlantic.

Answer (c) The duration of a discharge at the sparking points of a synchronous rotary gap is so long that if the primary and secondary of the oscillation transformer were not kept wide apart a considerable amount of energy would be transferred back to the primary. This would increase the damping of the open circuit and an impure wave would be radiated. With a quenched gap the primary discharge is much shorter and the open circuit retains all of its energy. Because of this, closer coupling between the closed and open circuits can be used with a resulting increase of efficiency of the transmitter.

Answer (d) Sparking at the safety gap of the transformer when the synchronous rotary gap is used is probably caused by the gap not being properly 'synchronized.' When a gap of this type is used the stationary and rotating spark points permit two discharges a cycle. The discharge must be regulated to occur when the leyden jars receive maximum voltage. This regulation is brought about by the threaded adjusting rod fastened to the iron casting supporting the stationary electrodes. If the sparking points are not opposite when the jars are ready to discharge, a spark will jump across the safety gap, thereby relieving the strain on the windings of the transformer.

H.B.W. writes:—Why is the tuning so broad when the series condenser is used in the open circuit of a receiver?

Answer:—A series condenser invariably increases the effective resistance and therefore the total damping of the open circuit. A highly damped circuit cannot be easily brought into resonance with another tuned circuit.

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OUR NEWSPAPER IN A NEW GUISE

Operator D. Mann Taylor has forwarded the accompanying picture of Mrs. Clapp, one of the lady passengers on the maiden trip of the Ecuador, leaving San Francisco for the Orient, August 27th. She very deftly made a "dress" out of Ocean Wireless newspapers, using the booklets and inserts in quite an original manner. Her husband represented a signal station with a flash light bulb on his cap.

The occasion was a "fancy dress" dinner on board in mid-Pacific. The dining room was darkened as they came in, a little later than the rest of the passengers, and as they entered Dr. Clapp flashed off "Greetings, 73." The lights were then turned on and the whole company assembled applauded heartily the originality of the idea created by the newly wedded couple on their honeymoon trip. It was quite a novelty and they were awarded the first prize.

Mr. Taylor says of the premier trip: "Although we had a very light list of passengers, I sold 800 papers and did \$285.00 Marconi business. I used to double and treble that on the Korea, but I had more people on board, and of course the Korea was a larger ship."

A SUSPENSION FOR CHANGING ADJUSTMENTS

Operator A. W. Peterson, of the Marconi Hillcrest station, at San Francisco, was suspended without pay from October 22nd to November 16th, for having changed the adjustments of the transmitting set at the Hillcrest station on August 30th, mak-

ing the coupling much closer than the adjustment data posted in the radio room provided for.

All operators are strictly cautioned against making any adjustments to their transmitting apparatus which are not in accordance with the tuning data posted in the radio room.

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EXECUTIVE OFFICE NOTES

George S. DeSousa, Traffic Manager, returned to New York December 20th, after an extended trip through the West, during which he reorganized the Pacific Coast Division and had full charge of the opening of the new service between California, Hawaii and Japan.

E. B. Pillsbury, General Superintendent Transoceanic Division, returned to New York on December 20th, after a four months trip through the Pacific Coast Division. During his trip he visited Alaska, Hawaii and California.

The Marconi Company has inaugurated a Commercial Department, and David Sarnoff, former Assistant Traffic Manager, has been appointed Commercial Manager, with headquarters at New York City. G. Harold Porter has been appointed Assistant Commercial Manager.

Lee Lemon, former Superintendent of the Transoceanic Division, has been appointed Purchasing Agent of the Marconi Company. He takes office January 1, 1917.

C. J. Ross, former Auditor, has been appointed Comptroller. He will also enter upon the duties of his new office January 1st. As his lieutenants, H. A. Sullivan, former Chief Clerk, has been appointed Auditor of Disbursements, and Henry Heisel, former Traffic Auditor, has been appointed Auditor of Receipts.

EASTERN DIVISION NEWS

An attractive card carrying the Marconi trade mark and appropriate holiday greetings was sent out Christmas Day by the staff at 42 Broad Street.

Victor Rand has returned. He is on the Medina, of the Mallory fleet.

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A. A. Borch has come back to the fold. Borch is bound for Italy on the Campana.

E. Barnwell, the veteran operator, is in charge of the Monterey.

John R. Conway is senior on the Comanche.

L. J. Ainley is serving on the Amazonia, a one-ran ship.

Leslie Walters, a recent graduate of the school, is junior on the Byron.

R. C. Thomas is enjoying what, to him, is a novelty—a long-trip ship. He is attached to the Camino.

O. F. Williamson is on the El Capitán, cruising to West Indian waters.

Leo Goldblatt was assigned by the Southern Division to the Pearl Shell when she was equipped at Baltimore a few days ago. Goldblatt has seen quite a little service in the south.

Harry Slater is junior on the El Cid.

George Menhnick is getting the weather reports on the D. N. Luckenbach. It's his first long trip.

H. A. Williams is junior on the Mexico II.

Arthur Gray is on the Muskogee.

G. R. Wimpfheimer is junior on the El Occidente.

C. F. Asche is on the Alamo. Asche was formerly an operator in the army.

Bill Payne is first on the City of St. Louis.

H. T. Williams is on the Avellana.

R. J. Clarke is operator on the Wellington, a new equipment.

D. B. Templeton has recovered from his illness and has been assigned to the Concho as second. Templeton was glad to return to work.

J. F. Flagg is on the Doehra. Flagg made a special trip across on the San Rossore before joining the Doehra, and liked it.

W. A. Ray is visiting southern ports on the Santiago.

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P. H. Cartier, late of the Southern Division, is on the Paloma.

Baldwin Guild has won promotion to the Engineering Department, and seems well on his way to become Chief.

A. Cruttenden is now attached to Sea Gate station.

L. F. Kendall is junior on the City of Columbus.

J. M. Harrison has been assigned to the British steamer Korona as operator in charge.

Charlie Gould is back from the border and we hear he is to write an article for *The Wireless Age* relating his experiences in New Mexico while attached to the radio section of the New Jersey National Guard. Gould is now on the Arapahoe.

Ralph Harris, who until recently worked in the Great Lakes Division, is on the Comet of the Standard Oil fleet.

S. Cissenfeld was assigned to the tug Britannia by the Southern Division. The Britannia is making a voyage to England.

David Levin was placed on the Larimer by our Baltimore office.

E. T. McCauley, of the Southern Division, is on the Wilmore, formerly the Atlantic.

A. DeBrosky is on a two months' trip to Southern ports on the Bayway.

S. Gaskey, a man we're proud to know, has returned to the service of this Division. He is senior on the Morro Castle. For the last year or two Caskey has spent most of his time with the Pacific Coast Division.

H. H. Redlin has returned to duty after a short leave of absence necessitated by ill-health. He is on the Brilliant, seeing life.

J. M. Bassett is senior on the Manchuria. Frank Schneider is with him.

John A. Nash, who a couple of years saw duty on various ships of the American Line, has returned to the service. He is junior on the St. Paul.

William Sirkin is senior on the Apache. Sirkin only lately returned from a long trip on the Virginia.

G. B. Ferguson, popularly known as "Plugs," is attached to the Virginia.

G. P. Hamilton is on the San Jacinto. George Draper is with him.

G. R. Townsend, a school man, is junior on the Hamilton.

M. Kanter is junior on the Philadelphia, of the Red D.

Frank Velten is junior on the Morro Castle.

Eric W. Arnold has returned. He is on the Guiano, running to West Indian ports.

Frank Gressly is making a long trip on the Westoil.

Joel Smith, a school man, is junior on the El Siglo. Flack has been promoted to operator in charge.

Frank Rosenquist is in charge of the New York, of the American Line. Frank has reason to think pretty well of himself after appointment to this post.

SOUTHERN DIVISION NEWS

Little John is coming to Baltimore during the holidays, so we are told. The rumor goes on to say that it is not solely that John wishes to spend Christmas in Baltimore, but that he expects to take back to the beach with him one of the greatest Christmas gifts one could wish for.

From 11 p.m. November 17th, until 3 a.m. November 18th, the Motorship Bramell Point, 684 miles East of Nantucket L.S., was heard by Mr. Murray and the operators on the Steamer Ontario, while the latter was coming up Chesapeake Bay. The

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signals were heard clear and strong through interference from numerous 2 k.w. sets. The Bramell Point was equipped by Mr. Murray, at Baltimore, with a 1/2 k.w. set.

J. Franklin Wyble recently left Baltimore to equip the Veenbergen, at Newport News, and to make some repairs on the Kaikoura.

E. M. Murray has been transferred from Baltimore to Philadelphia, where he has taken charge of the construction work in that district. Mr. Murray has taken the place made vacant by the promotion of Mr. Morris.

Mr. George I. Gerson, of the Construction Department, New York, has been appointed construction engineer of the Southern Division at Baltimore. Mr. Gerson takes the place of Mr. Murray.

Mr. Murray has completed the equipment on the Royal Arrow, and wound her up with 22.5 amps., in the antenna.

Operator Jos. Bernert was recently relieved on the Paraguay by J. W. Channell, a new man in the service.

Junior Operator Weber has been relieved on the Quantico by Jos. Pawson.

Vincent Zito has been assigned to the Howard as senior operator, relieving L. H. Gilpin. H. P. Jernigan is junior.

Lloyd E. Bell, who has returned from Cape Hatteras, where he has been relieving during vacations, has been assigned to the Ontario as senior.

P. E. White recently transferred his duds from the Norlina to the Alamance, where he relieved Henry McKiernan, resigned. Henry is now an electrician's helper for a gas company.

P. Fretz, formerly on the Toledo, relieved P. E. White on the Norlina. Fretz was relieved on the Toledo by

Arthur Ault, from the Delaware Sun.

Mr. Ott, a new man in the service, was assigned to the Delaware Sun, relieving Arthur Ault.

J. S. Merritt has been transferred from the Kershaw as junior, to the Rockingham as senior, relieving Loyal W. McKee. Mack is acting senior on the Kershaw temporarily, with Curtis as his junior.

Statistics show that out of eighteen coast station managers and operators of the Southern Division, there are fourteen married and four single, which speaks well for the common sense of the Southern Division.

GREAT LAKES GOSSIP

E. A. Nicholas, chief operator at Cleveland, is spending his vacation at home.

E. C. Wahl, operator in charge of the Buffalo station, is spending the winter at Buffalo, having closed up for the winter on December 1st.

The Mackinac Island station also closed for the winter on December 1st. George Grostick, operator in charge of that station, dropped in to see us the other day and stated that he intends to go to the Atlantic Coast after Christmas.

The Eastern States, of the Detroit & Cleveland Navigation Company, with operator R. S. Henery in charge, laid up for the season on December 2nd. Henery has gone to the Atlantic Coast for the winter.

The City of Buffalo, of the Cleveland & Buffalo Transit Company, operator E. J. Ermatinger in charge, laid up for the winter on November 19th. Mr. Ermatinger is spending the winter in Cleveland.

The City of Cleveland 111, of the Detroit & Cleveland Navigation Company, laid up for the winter on No-

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vember 19th. Operator L. C. Waterstrout, formerly in charge of this vessel, has gone to the Atlantic Coast for the winter.

The City of Erie, of the Cleveland & Buffalo Transit Company, laid up for the winter on November 18th, and Operator Irving Wallace, formerly in charge of this vessel, has returned to school.

A. E. Jackson, superintendent of construction, has just returned from a trip to Chicago, having gone there to look after the installation of the new Chicago station, which is being moved from the Congress Hotel to the Transportation Building.

Operator C. M. Dibbell has been assigned to the Nevada, Operator D. B. Oliver of the Nevada reporting for duty at New York about January 1st.

Operator E. Brandt has been assigned to the night position at the Ludington (Mich.) station.

Operator E. W. Kreis has reported for duty at New York.

L. Lynn, formerly on the City of St. Joseph, has been assigned to the Alabama.

Operator Raymond Ehling has been assigned to the Arizona.

SAN FRANCISCO CHANGES

H. W. Underhood, in charge, with B. R. Hassler as assistant, sailed on the Alliance for Mexican West ports, November 22nd.

F. W. Harper, formerly of the West Coast was assigned to the Aztec at New York, November 29th.

J. A. Stirling assumed charge of the Avalon station December 8th, relieving D. C. McMullin, who will resume his duties at Avalon at the conclusion of his annual vacation.

E. R. Fairley, of Standard Oil Barge 31, returned to his vessel on December 9th, after spending three

weeks visiting relatives in the Southland.

T. C. Eastman rejoined the Beaver as operator in charge at the expiration of his six weeks' leave. His tour of the Middle States was of considerable interest and full of pleasure.

M. J. Hankins was assigned operator in charge of the Columbia, at Seattle on October 28th. George Street is acting assistant.

A. E. Brady was assigned to the Celilo as operator in charge on November 26th.

J. J. Michelson joined the Steamer F. A. Kilburn as assistant on December 8th.

H. W. Everett and J. E. Dickerson are acting first and assistant on the Lurline.

E. T. Jorgensen was assigned operator in charge of the Manoa, November 17, relieving J. A. Mische, resigned.

R. Ticknor relieved E. Smith as operator in charge of the Matsonia when Mr. Smith was transferred to the High Power station at Kahuku.

W. Chesebrough has been assigned to the Steamer Multnomah as operator in charge, vice E. T. Maher, resigned.

W. W. O'Farrell joined the Steamer Oregon, of Wilson Bros. & Co., on November 15th. This vessel is a new addition to our fleet, equipped with a P5 set on November 4th.

G. Crous sailed on the Paraiso for South American ports, November 4th.

C. F. Trevatt and C. A. Lindh are acting first and assistant on the President.

The Umatilla, with operators C. M. Jackson and G. Knudsen, is again on the Seattle-San Francisco run.

W. J. Erich and F. Mousley are holding down the job on the Steamer Wilhelmina as first and assistant, respectively.

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233 BROADWAY, NEW YORK

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