

MARCONI SERVICE NEWS

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Edited by J. Andrew White.

A DREAM THAT MATERIALIZED

An Editorial from the Cedar Rapids (Ia.) Gazette

ABOUT eight years ago two men visited Cedar Rapids as representatives of a company that was financing a wireless telegraphy project. They explained that a man named Marconi had perfected an invention that was going to revolutionize the telegraphic world and they were traveling in the west for the purpose of selling stock, the proceeds from which were to be used in developing and marketing the Marconi wireless.

Most people were skeptical. The representatives had wireless apparatus with them and they gave demonstrations in the auditorium. Some persons, somewhat less skeptical than the majority invested a little money in the stock. That was the last they heard of the men who delivered the certificates and took their money. They never received any dividends, and they grinned at one another and decided that they had been victims of a flim-flam.

Recently a Cedar Rapids woman decided to find out whether her stock was valuable or worthless. Marconi has become famous, as has his wireless system of telegraphy. The local woman wrote to the American Mar-

coni representatives in New York. They replied that her name was not on their stock books and that, so far as they could discover, she owned none of their stock. They requested that she send her coupons to them, so that they might learn how the fraud was perpetrated. She complied with their request.

A reply came from New York to the effect that the stock was good, but that it had been issued by the Marconi company of London, not by the American company. They advised the woman to get in touch with that concern, and she did so. Then she received dividends for the last eight years. There are a few other owners of Marconi stock in this vicinity. They can obtain money in the same way.

Just a few years ago people were calling Marconi a dreamer. They laughed at his plan to transmit messages across miles and miles of sea without the use of wires. But Marconi had courage and convictions—without which, by the way, no man achieves greatly—and he refused to be laughed down. Now he is hailed as a genius, one of the inventors who pave the world's path of progress.

Without its dreamers this old planet would be a poor place in which to live. Contrary to the common belief, it is the dreamers who do. Edison dreamed, and now we can hear Caruso and Melba as they sing from a small, round stage of black glue in to the top of a mahogany box. Bell dreamed and we speak across the continent over the telephone. Dreams built the first skyscraper, the first

steamship, the first locomotive, the first submarine, the first air ship, the first subway. Dreams have been responsible for most of the world's great achievements.

That is why Cedar Rapids people who once had a small amount of faith in what then was widely thought to be a dream, now can collect dividends on their Marconi wireless stock.

THE MARCONI WIRELESS AID ASSOCIATION

AT a regular meeting of the Marconi Wireless Aid Association, held recently at the head office, 233 Broadway, New York, reports were submitted by the secretary and treasurer showing that the association is in a healthy condition.

The association is founded on the desire of the employees of the Marconi Wireless Telegraph Company to assist each other and to provide substantial aid in cases of illness or accident by providing a fund for that purpose. All regular employees over eighteen years of age, of good moral character and bodily health are eligible to membership. At present only sick benefits will be paid, but later on it is proposed to add a death benefit.

The affairs of the association are managed without expense, except for postage and necessary supplies. For that reason all the members are directly interested in its welfare, and the officers must rely largely on them to bring its merits and advantages to the attention of those who are not yet enrolled. It goes without saying that as the association grows numerically, so will its power increase to aid worth brother employees or their families who are in distress.

THE STORK CALLS AT ASTORIA

In a letter recently received from A. M. Greenwell, operator in charge of the marine station at Astoria, Ore., this interesting observation is made:

"I take pleasure in informing you that we have a eleven and a half pound boy at our house. He arrived this morning and is a big husky—a veritable athlete."

Mr. Greenwell became a benedict on December 4, 1914, marrying Miss Lillian F. Johnson, of Blind Slough, Oregon. Mrs. Greenwell before her marriage was one of the most popular employees of the telephone company at Astoria.

"73"

Our San Francisco Chief Operator claims to be as neutral as any loyal American citizen can be on the European war, and submits as evidence two Christmas cards received from sources widely separated and opposed.

One is from Fritz Kleist, now prisoner of war in the detention camp at Hunyhom, Hong Kong, China. The other from E. E. Castle on active service "somewhere in France," reading, "A word of greeting to my late 'chief,'

with pleasant memories of the time spent while under his charge."

Both boys are old Pacific Coasters of the kind we like to hear from, and to them we extend the fervent hope that they may again meet each other in the land of freedom and friendship.

ELDING TELLS ONE ON VAN

ONE of the previous issues stated that C. M. Vandenburg had joined the Multnomah as assistant, Nov. 6. Van is a new man, but still he is a full fledged operator and, like all full fledged marine operators, a regular fellow. One night about nine o'clock Van came strolling in to the wireless room. We were bound for San Pedro that trip and were due at six o'clock next morning.

"I'll match you," he said, "and if I lose, I'll take the watch till we get

in, or six in the morning, and if you lose, you stay on till three".

We matched and I lost, so I stayed on till three. The Multnomah, although a steam schooner, is faster than her shadow and arrived three hours ahead of time. I signed off at 3:00 A.M. in dock, San Pedro—30.

"Here is where I get one on Van," I thought; so I went in to the room and called him. "Old man," I said, "it's three o'clock and we've run into a fog. The whistle cord broke, so we've stopped. Better hurry up and get on the job."

It had been an exceptionally smooth trip, so Van jumped up none the wiser, and at exactly five minutes after three, he was on the job. So far as he knew I was already asleep.

He looked at the log, put his head out of the door and—

I think it best to stop here.



The firemen of the factory at Aldene as they appeared in a recent parade

BRASS TACKS, *DRIVEN BY C. W. ROSS*

TWO WAYS OF DOPING IT OUT—WHICH IS YOURS?

Get busy! Don't waste a minute of time.

Keep pulling away from the mob,
You'll find if you don't that some other bloke

From the rear will step into your job.

When Procrastination meets you on the way,

Just give him a glance—don't stop,
Hang a sign on your brain, "Do it now" if you wish

To keep climbing on up to the top.
Let other men tarry and loaf if they will

And grab at temptations galore
You'll find in the end, they haven't a friend

When Old Age knocks on the door.

Why worry and study and strive and fret,

Till your nerves all go to smash,
Why waste all your life in a gruelling strife

To pile up a big bunch of cash,
Why lose all the fun in life when you're young

And to Effort your talents be giving,
This old life is short, why not be a sport?

For this universe owes us a living.
Let other men hustle and strive if they will

And pass up temptations galore,
My life is my own and I may not be home,

When Old Age knocks on the door.

Are you *ABSORBING* and *STORING AWAY* the bits of useful *INFORMATION* which come your way each day?

You are a *BIG BUSINESS*.

You operate a *BIG PLANT*.

You are a *MANUFACTURER*.

You are also a *SALESMAN*.

You are continually manufacturing *BRAIN CELLS*.

The *BRAIN* is your *CAPITAL ACCOUNT*.

Are the cells you are adding to it *CAPITAL CELLS* or *EXPENSE CELLS*?

The *BRAIN* thrives on what it is fed.

Have you given as much *THOUGHT* to the *FOOD* you choose for your *BRAIN* as to the *FOOD* you choose for your *BODY*?

If you want a *HEALTHY BODY*, you choose good *SUBSTANTIAL FOOD*.

If you want a *HEALTHY BRAIN* you must choose good *SUBSTANTIAL THOUGHTS*.

Be an *EPICURE*.

If you tempt your appetite with *LUXURIES* it will demand *LUXURIES*.

If you tempt your *BRAIN* with *LUXURIES* it will demand *LUXURIES*.

Don't nourish the *BODY* and neglect the *BRAIN*

Build them *BOTH* up.

Then you will have something to *SELL*.

There is a *BIG MARKET* awaiting you

AND things that seem hard *TODAY* will be easy *TOMORROW*.

SERVICE EFFICIENCY

By

H. Chadwick, Telegraph Instructor,
Marconi Service School

FROM the different articles which I have read in wireless journals; from the discussions in which I have entered at various times with men in the Marconi field; and from my own observations made while teaching at the Marconi School in New York, I have become more and more convinced that the question of efficiency of service should be thoroughly and comprehensively tackled, if wireless is to maintain its natural rate of progress.

What does efficiency of message service mean? It implies, first, a standardized system with uniformity of method in its application; second, good manipulative men co-operating to secure harmonious running of the internal mechanism of the business.

I am aware that thus far the Marconi organization has been hampered in securing this efficiency; we have had articles urging upon operators the optional use of unofficial codes, written in a strain which tends to make one believe that the rule book is rather to be ignored than observed. The result is chaos. Such instances as sending figure 4, for "Are you busy?" instead of the official QRW are foolish and unwarranted, and I feel confident that it is only necessary to bring these instances to the notice of the operators generally to secure the essential uniformity.

With this in view I write this appeal to the operators, hoping to sufficiently emphasize the need for a more rigid adherence to the official rule book, so that we will all help to standardize the system.

Considering first the manipulative men: Are they real effective units of

the Marconi organization—cogwheels of consequence in the great Marconi machine? I am afraid that a considerable percentage of them do not come up to the necessary standard. Correspondence frequently reaches the New York office with specific instances of the shortcomings of operators.

The question of courtesy, for example. To use the words of our General Manager, courtesy means respect, politeness, kindness, and is synonymous with good breeding. As with the telephone, so with wireless; some people seem to hold the idea that speaking over a distance gives them the privilege of being harsh in their manner and discourteous, but the wise operator knows that he never loses anything by being polite.

Then, a most important point, is indifference to the possibilities offered by ship and land station experience for the development of their capabilities. A large number of our men are content to go along on their past records instead of putting forth every effort in the direction of self-improvement. As a consequence, we find many who have been some time at sea unable to pass even a most elementary test in telegraphy. Instead of performing their duties in a perfunctory manner all operators should be eagerly looking forward to advancement, remembering that many opportunities will present themselves and will be within grasp of the wide-awake operator.

In the disposal of traffic and other communications the good operator is readily recognized by his fellow workers. In sending, correct spacing and formation are always evident. He knows when it is necessary to send fast and when to send slowly. In receiving messages he knows the shortsightedness of the viewpoint which

imposes a partial boycott on the slow sender—for while speed with accuracy is desired, accuracy before speed is essential. More traffic can be moved in a given time by good steady sending, say about twenty words per minute, than by the speedy sending which is usually erratic. After years of practical experience I still firmly hold the opinion that the old slogan, "Work to get R, and not Rept," should be followed by every operator.

Obviously there are two sides to the transmission of every message, that of the sender and that of the receiver. One necessary part in the equipment of a good receiver is the ability to write with ease, speed, and legibility, yet it is a lamentable fact that 75 per cent. of our staff may be classed as poor in the matter of handwriting. Regular practice is all required to remove this obstacle to efficiency in receiving.

Now as to the strict observance of rules as set forth in the Company's General Order Book. Not alone in the Marconi service, but in all big commercial undertakings where a code of rules is necessary, there seems to be a prevailing notion, hard to understand but nevertheless present, that rules are framed with no object other than the satisfying of some whims of the men on the administrative staff. It needs but a moment's reflection to realize that the vastness of such an undertaking as the Marconi Company's makes essential a uniform code of rules and that those rules should be conscientiously adhered to by the staff.

Reference to a few of the rules which stand prominently in my mind, might be made here with advantage. Take first the matter of clerical duties as set forth in chapter 5, and the importance of which is pointed out in rule 26. Of the abstracts received

at New York less than ten per cent. are correctly made up, and although errors are constantly pointed out to the operators at fault, they continue to be received in the same unsatisfactory manner.

Rules 28 and 32 state that all amendments to general orders, alterations in tariffs, entries of all circulars and memoranda, should be kept posted right up to date. How many operators can say that they pay strict attention to these requirements? Clerly it is for the benefit of the operators as well as the Company that these obligations should be met, but cases frequently arise where the operator is unaware of instructions that have been issued relating to the particular ship to which he is assigned.

Attention is repeatedly drawn to the seriousness of superfluous signaling, especially as it concerns unnecessary repeating of words and spelling out figures after having sent them. Repetition of groups of letters and figures is perfectly in order and the rule book has made provision for just such repetitions by requiring that all figures be collated in the abbreviated form at the end of the message. The observance of this rule is all that is necessary to ensure the satisfactory transmission of figures. Before this is possible however, it is imperative that the short figures be mastered, because very few of the men are capable of translating them when used.

When static conditions prevail, Special order No. 33 should be followed in meeting with any emergency that may arise from that source.

Judging by the frequency of errors noticed at New York, the correct word counting of messages appears to present some difficulty to a number of our men. This should not be so, for the Company's instructions are

explicit and illustrated with numerous examples. A regular stumbling block is the counting of the office of destination. This should always be reckoned as one word; the Marconi ruling, and indeed the International ruling is to this effect. Examples are as follows:

Bretton Woods, New Hampshire, is to be calculated as one word and transmitted, Brettonwoods nh.

New Canaan, Connecticut, as New-canaanconn, 1 word.

Staten Island, New York, as Staten-islandny, 1 word.

The rule covering the counting of wireless messages is known as the cable count; that is, everything sent is counted and charged for; excepting of course, the preamble. The common practice of allowing the name of the State in parenthesis to go uncounted and uncharged for, is an unjustified contravention of this rule. The cable method of overcoming this difficulty is undoubtedly the best yet devised. The abbreviated name of State is added to the name of the town so as to form one word. The official list of these abbreviations is here set forth with examples as they should be sent.

Alabama. Ala.	Mobileala.
Alaska. Alaska.	Sitkaalaska.
Arizona. Ariz.	Douglasariz.
Arkansas. Ark.	Littlerockark.
California. Calif.	Fresnocalif.
Colorado. Col.	Denvercol.
Connecticut. Conn.	Bridgeportconn.
Delaware. Del.	Doverdel.
Dist. of Columbia. DC.	Washingtondc.
Florida. Flo.	Jacksonvilleflo.
Georgia. Ga.	Maconga.
Idaho. Ida.	Bosieida.
Illinois. Ill.	Chicagoill.
Indiana. Ind.	Fortwayneind.
Iowa. Ia.	Desmoinesia.

Kansas. Kans.	Topekakans.
Kentucky. Ky.	Lexingtonky.
Louisiana. La.	Neworleansla.
Maine. Me.	Portlandme.
Maryland. Md.	Baltimoremd.
Massachusetts. Mass.	Bostonmass.
Michigan. Mich.	Saginawmich.
Minnesota. Minn.	StPaulminn.
Mississippi. Miss.	Jacksonmiss.
Missouri. Mo.	StLouismo.
Montana. Mont.	Buttemont.
Nebraska. Neb.	Omahaneb.
Nevada. Nev.	Goldfieldnev.
New Hampshire. Nh.	Concordnh.
New Jersey. Nj.	Trentonnj.
New Mexico. Nmx.	Santaafenmx.
New York. Ny.	Albanyny.
North Carolina. Nc.	Wilmingtonnc.
North Dakota. Ndak.	Bismarckndak.
Ohio. O.	Cincinnati.
Oklahoma. Okla.	Tulsaokla.
Oregon. Ogn.	Portlandogn.
Pennsylvania. Pa.	Pittsburgpa.
Rhode Island. Ri.	Providenceri.
South Carolina. Sc.	Charlestonsc.
South Dakota. Sdak.	Watertownsdak.
Tennessee. Tenn.	Nashvilletenn.
Texas. Tex.	Galvestontex.
Utah. Ut.	Ogdenut.
Vermont. Vt.	Burlingtonvt.
Virgin'a. Va.	Norfolkva.
Washington. Wash.	Seattlewash.

West Virginia.	Wva.	Wheelingwva.
Wisconsin.	Wis.	Milwaukeeewis.
Wyoming.	Wyo.	Cheyenneuyo.
	Canadian	Provinces.
Alberta.	Alta.	Calgaryalta.
British Columbia.	Bc.	Vancouverbc.
Manitoba.	Man.	Winnipegman.
New Brunswick.	Nb.	Northumberlandnb
Northwest Terr.	Nwt.	Missionnwt.
Nova Scotia.	Ns.	Halifaxns.
Ontario.	Ont.	Torontoont.
Prince Edward		
Quebec.	Pei.	Georgwtownpei.
Is.	Que.	Montrealque.
Saskatchewan.	Sask.	Moosejawsask.
Yukon.	Yt.	Dawsonyt.

Up to the present time no regular system of correcting wrong checks has been in use. The matter of correct checking seems to be treated somewhat lightly by operators who should understand the importance of this part of their work. Checks should always be verified when the message is received. Especially in the case of ship stations is this necessary, as failure to do so often causes needless service traffic through the loss of the opportunity to make the correction directly with the station of origin.

In order that some simple system of correcting wrong checks be introduced, it has been decided to use the method known as the "fives" method, an example of which is here given. We will suppose the receiving station has only 17 words against a check 18; he would give the sending station the information as follows: "In nr.... 17 wds, 5....10....15....; giving the

fifth, tenth and fifteenth words as received. The correction would be easily and quickly made by the sending station repeating that portion of the message where the word had evidently been missed. In our example we will suppose the fifth word agrees, and the tenth does not. The procedure at the sending station would then be as follows: "In nr.... 10 no," repeating from the fifth to the tenth word inclusive.

In a message of considerable length the "tens" method could be similarly employed, in which case the tenth, twentieth, and thirtieth, etc., words would be quoted.

Relating to requests for repetitions, it is clearly the case that operators are now using their own methods. The Company has adopted as standard the method used by the U. S. Naval Radio Service, which will be found on pages 32 and 33 of "Commercial Traffic Regulations." This should insure uniform working, not only throughout our own service, but also in conjunction with the Government service, with which we are constantly in communication.

Examples of the above mentioned method are here shown.

1. To have a single message repeated:

WSE

 KVF
 - . -

2. To have one of a series of messages repeated:

WSE
 4

 KVF
 - . -

3. In case the last part of a message had been lost, to have repeated all after the last word received:

WSE
Nr (if necessary)
coming
.....
KVF
- . -

4. In case the first part of a message had been lost, to have repeated all up to the first word received:

WSE
nr (if necessary)
.....
coming
KVF
- . -

5. To get repetition of one or more lost or doubtful words:

WSE
nr (if necessary)
report
.....
ships
KVF
- . -

It will be readily seen that the examples cover every form of repetition which may be necessary.

Many of our operators are only made aware of the rule forbidding the transmission of verbal messages, upon being presented with a bill covering some case of their irregular working. Such communication is the cause of much interference to the working of other stations. If the message be of a social nature, the Company has extended to the operators the privilege of sending DH messages. If the message be in reference to traffic, it is proper to send a service.

As to abbreviations: The list of authorized abbreviations adopted by the Radiotelegraphic Convention should be universally observed. Almost every emergency which the

operator is likely to meet has been considered, and if any emergency arises which does not appear to have been covered, it is up to the operator to make a suggestion to headquarters rather than introduce some code of his own. It is a fact that there are many unauthorized abbreviations in use, and their employment is to be deprecated.

In the matter of prefixes. Failure to comprehend the true significance of the rules relating to prefixes, is the source of endless trouble and irritation at every receiving station. The chief point in which the operators err is in prefixing relayed messages. It should be borne in mind that prefixes are primarily intended as a guide to the receiving station in the use of the proper blanks, and for this reason it is essential that care be exercised in the transmission of the prefix. As an example, suppose a message from WSE to the Havana, was relayed by the Esperanza as the intermediate station; Seagate would send the message prefixed X, thus indicating to the operator on the Esperanza the character of the message and the requisite form to be used. The Esperanza's operator would then send on the message to the Havana prefixed P, which would in a like manner show that the Havana was the station of destination.

Government messages are prefixed S, the old designation OFM having been abolished, according to the latest Naval Radio Service Regulations.

Service messages, prefixed A, are messages relating to traffic and should always have compactness as their chief characteristic, that is, everything necessary stated in as few words as possible.

Paid service messages, Prefix ST, are messages exchanged between stations at the request of the sender of

the message to which the service refers. They are sent for various reasons, such as correcting an address, correcting or verifying words, or to cancel a message.

Regarding the foregoing and in fact, prefixes generally, I urge the operators to study that chapter in the General Order Book devoted to the subject.

Other shortcomings of the operators are manifested in the care of the wireless room, apparatus, and stationery. Our patrons are justified in expecting first class service; the General Manager is seeking the co-operation of our men in the maintenance of a high tone of efficiency, and the operators are looked to for the attention to details which such a standard implies.

It is my earnest wish that the staff recognize the necessity for these few comments, remembering that comment and discussion are invaluable as a means of bringing us nearer to the realizing of facts, to realizing the existence of the barriers that lie in our path, and in causing us to reflect as to the most effective method of removing these obstacles. It is hoped the men will be stirred to think, and in this way do some good. It will probably emphasize to a number of operators the need for concentrated energy if they are to become real live wires in the Marconi organization. For there is no disputing the fact that the existence of the causes of inefficiency which have been mentioned, is real.

No large commercial organization can furnish an efficient service to its customers, unless there be uniformity of method that is adjusted and controlled solely by the executives at headquarters. A fault in the smallest cogwheel will bring the whole machinery of efficiency to a standstill; there-

fore the building of a machine that will run true demands the discarding of cogwheels that do not fit.

The mutual interests of the Company and the men can best be served by the operators being found prepared when the wireless world enters into that era of prosperity which is undoubtedly imminent.

EASTERN DIVISION NEWS

The other day, Operators See and Florence of the Morro Castle, and Yuter and Martin of the Esperanza, wishing to get their ships in a style befitting their position in life, decided to do what one temporarily deprived of his private car must resort to—order a taxi. Thus it was that the crowd at Elm Street had the interesting sight of four operators, their lips curling with contempt at the thought of a street car, piling into a machine with their grips and packages. Already it is being whispered that we may soon expect to see a long line of taxicabs drawn up before the curb at Elm Street and a string of chauffeurs standing more or less respectfully at attention, awaiting the descent of the elevator from the eighth floor of the Edison Building.

C. A. Smith, recently graduated from the school, is off to South America. He is junior on the Crofton Hall.

J. F. Forsyth is senior on the Korea of the Atlantic Transport Line. Forsyth is well known to Boston men.

S. W. Young is on the Bantu, making a long voyage to South America. It will be late in summer before he returns.

S. Rudonett has been placed on the Souchan, a newly equipped vessel. The Souchan will start for Russia in a month or two.

H. L. Crandall has resumed duty on the El Oriente.

O. C. Temple is on the Munwood, a newly-equipped vessel.

F. B. Illingworth is on the Canastota bound for Australia.

A Great Lakes man, C. W. Thomas, has been assigned as junior on the Arapahoe.

J. J. Kaleta is on the Comet.

Frank Rosenquist is on duty on the Henry Williams, a newly-equipped boat.

The Motano, of the Standard Oil fleet, has been equipped. W. J. Meekin wears the telephones.

C. J. Whitney is on the Camaguey.

Walter Oliver is junior on the Mayaro.

C. W. Wizeman, from the school, is junior on the El Rio.

E. T. Darlington, of the Baltimore Division, is attached to the Gargoyle, a vessel which has just been equipped.

Fred Stone, of the New Orleans Division, has been appointed operator on the S. Y. Diana. The Diana has just been equipped with a 1-2 k.w. panel set.

C. S. Rice is first on the El Dia. Rice has made a reputation for himself by his careful abstracting. He is so painstaking in searching out rates and in drawing up his report that were a medal to be offered for the neatest abstract, we believe Rice would stand in the front rank of the worthy.

W. C. Graff is senior on the Saratoga.

Lester Hammond, a new man, is on the Gulfstream.

G. H. Fischer, of the Baltimore Division, is on the Santa Barbara, which has just been equipped.

Lester Brown, a graduate of the school, is on the El Siglo as second.

J. R. Joiner is on the Glenpool, sailing to Mexican and Gulf ports.

W. J. Swett has been transferred

to the Calvin Austin.

A. E. Ridley is on the Nacoochee.

M. W. Grinnell is on the North Star.

B. N. Lazarus and E. B. Ross are senior and junior respectively, on the El Cid.

Lee Outten, a Baltimore man, is on the Moreni.

G. P. Hamilton is serving on the Comal.

Carl Orloff is on the Communipaw. Harold F. Ward has re-joined the Shenango.

H. E. Cohen is attached to the J. L. Luckenbach.

R. J. Kingsley has been assigned to the Dochra, which has just been equipped.

R. Voelker is making a trip to Athens on the Ioannina of the Greek Line.

J. M. Bassett is first on the Huron.

J. A. Quinlan is on the Iroquois as senior.

The Princeton of the Standard Oil Co. of New Jersey has been equipped with Marconi apparatus. J. R. Churchill is operator.

SOUTHERN DIVISION NOTES

Otto E. Curtis, scientist, and senior operator on the Kershaw, has spent months experimenting with detector crystals with a view to making them regain their lost sensitiveness. We take pleasure in setting forth Mr. Curtis' discovery which will, no doubt, be a wonderful help to those using crystal detectors of the carborundum and cerusite variety:

First:—Scrub the crystal with Cuticura soap and hot water, using a tooth brush.

Second:—Wash the crystal in clear cold water.

Third:—Apply a thin film of tooth paste of a good make, then wipe off

with a clean cloth.

Curtis explains the method as follows: By scrubbing the crystal with soap and water, all particles of dirt and grease are removed. The tooth paste, he explains, lubricates the ions causing them to move more freely, thereby increasing the sensitiveness of the crystal.

Eugene M. Murray, expert troubleman of the Southern Division, purchased a pair of rubber boots to use during his stay at Virginia Beach.

Mrs. M. C. Morris presented Mr. Morris with a bouncing baby boy on February 10th. At last reports, both mother and baby were doing well. We extend our congratulations.

W. J. Phillips, third trick operator at the Miami Beach station, met with an accident about two weeks ago while riding a motorcycle. He has fully recovered and is again on the job.

F. H. Illingworth, recently second trick operator at the Cape Hatteras station, has been assigned the managership of the Jacksonville station, relieving Manager W. P. Kent, who has been assigned to the Virginia Beach station as second trick operator. Kent requested that he be transferred to a station closer to his home, which is in Wallingford, Pa.

L. W. McKee, who has been temporarily assigned to the Virginia Beach station, will be sent to the U. S. S. Pennsylvania as senior operator, during her trial trip, which takes place about the middle of February.

Ernest Postell Hough has been assigned to the Cape Hatteras station, taking the place of F. H. Illingworth. Lookout for the jitney busses, Ernest, also the razor-back hogs.

E. Michael Murray recently rebuilt the Virginia Beach station. Signals from that station are at least 100% stronger at Baltimore. Murray is also

installing a 1-2 k.w. panel set on the standard, at Newport News, Va.

W. F. Vogel, of the Borgestad, has been transferred to the Merrimack as senior operator, relieving F. H. Crone.

F. H. Crone has been assigned to the E. L. Doheny, relieving operator Bisgrove, who was assigned to the Merrimack as junior operator, relieving operator C. G. Smith, a new man in the service.

C. G. Smith has been assigned to the Kershaw as junior operator.

Walter Osterloh has been assigned to the Borgestad relieving operator Vogel. Osterloh was relieved on the Suwannee as senior operator, by L. W. Sinclair, recently of the Jacksonville station.

W. S. Wilson recently returned from the trial trip on the U.S.S. Oklahoma, and was assigned to the Nantucket as senior operator.

A Marconi 1-2 k.w. 500 cycle panel set has been put on exhibit at the Safety First Exhibition at Washington, D.C.

GULF DIVISION STAFF CHANGES

The Mascotte is now running on her winter schedule between Port Tampa, Key West and Havana. E. Hymel, of New Orleans, is senior and F. H. Hill, formerly of the Gov. Cobb, is junior.

D. R. Villareal, of Key West, is doing relief duty aboard the car-ferry H. M. Flagler relieving operator Benson who was called home on account of illness in his family.

Paul Cassels, senior on the Olivette was taken ill while at sea and on arrival at Key West was removed to the Marine Hospital. He resumed duty on Feb. 1. J. A. Velasco, a new man in the service, substituted for Cassels during the latter's illness.

The Pan American of the Texas

Company was re-equipped with one of our latest type 1-2 K.W., 500 cycle panel sets on January 10. The work was done at Port Arthur by Manager Armstrong.

H. D. Copeland, a Boston man, is operator (both senior and junior) on the Gov. Cobb, now running between Key West and Havana during the rush season. The Gov. Cobb will return north on or about March 15.

The tug Senator Bailey, recently purchased by the Gulf Refining Company from The Steel Towing & Wrecking Company of Galveston, was equipped with a new Marconi 2 k.w. 500 cycle panel set at New Orleans on January 30. R. E. Dale is the Marconi man in charge of the KGS.

W. Neely has been assigned to the yacht Wild Duck. The vessel is now in Mexican waters.

A. S. Cresse has been detached from the Miami. O. Reynolds, formerly senior on the City of Tampico is now in charge of the Miami with J. A. Velasco, a new man in the service, as his junior.

GREAT LAKES NOTES

The M. & B. No. 1 slid into an ice jam late last month, breaking a few of her ribs. She is now in dry dock at Cleveland getting ready for the spring campaign. Operator Nicholas says he would sooner be jammed by a street crowd than to wake up with a cake of ice as a berth partner.

Pere Marquette Car Ferry No. 19 went ashore about four miles north of Ludington in a heavy fog January 17. Night Operator Miller at Ludington Station answered her call and immediately notified the Pere Marquette officials regarding the position of the stranded vessel. Pere Marquette Ferries 17 and 18 were both near at hand at the time and offered to go to her

assistance, but Captain McIsaac of the No. 19 notified them that, it would not be safe to make the attempt on account of shoal waters and heavy seas. Messages were handled between the vessel and the P. M. offices until 3.00 o'clock in the morning of January 18, when Operator Millgard of the No. 19 notified Ludington Station that the water had reached the boiler room and that his power would last but a few minutes more. Shortly afterward the main steam pipes from the boilers gave way and the wireless was forced out of commission. The ship had no auxiliary power. Operator Millgard nevertheless stuck to the job, receiving such information as could be obtained regarding progress made by the life saving crew sent "blind" by Manager J. E. Clark from the Ludington Station.

On account of the ice and a high sea running it was two days before the crew was able to get ashore. When Millgard showed up at the station he said the ship was almost entirely covered with ice, but that neither the cabins nor wireless set were damaged. The No. 19 is now in dry dock at Manitowoc undergoing repairs.

H. E. Robinson, former night operator at Chicago, has just secured a license and made application for a job. About one year ago Robinson resigned. He said he was through with wireless and had torn up his license so as to be sure he would not work wireless again. That is the way with them—they just can't stay away.

H. W. Walters of the M. & B. No. 2 recently blew into Cleveland in search of new clothes and the rumor he is to become a benedict is growing apace.

A. J. Main, second at Cleveland, has gone to Syracuse to visit. We think John has some attraction there

other than his uncle, and we know it's not the overcoat he lost just before he left WCX.

SAN FRANCISCO STAFF CHANGES

The steamer Alliance is now operating out of the Southern District, calling at Mexican and Central American ports with San Francisco as headquarters. Operator-in-charge B. C. Springer, who was formerly a member of this Division, is wearing a constant smile which leads us to believe that his return, coupled with the relaxation period off the Mexican and Central American Coasts is all that could be desired. Assistant M. A. Obradovic is on his first visit and seems to appreciate sunny California after experiencing several Alaskan ice treading seasons.

We understand that Benedict H. Linden, recently assigned assistant of the steamer Bear, is in line for congratulations.

The steamer Breakwater, formerly of the Southern Pacific, has been taken over by the Doe Line and is plying between Portland, San Francisco and San Pedro with operators A. P. Stone as first and J. M. Switser, assistant.

J. E. Johnson, first on the steamer Humboldt, was assigned temporarily as assistant of the steamer Congress.

E. D. Perry on sick leave for the past month or so, joined the Celilo as operator-in-charge.

Our worthy station manager, F. W. Shaw has resumed his duties at the Hillcrest Station, after a two months illness.

G. C. Hallet formerly assistant on the steamer Humboldt has been assigned assistant of the steamer Klamath.

J. F. McQuaid and E. M. Sutton were assigned first and assistant of

the steamer Peru. The Peru has been on the lay-up list since Sept. 16.

J. A. Stirling of the steamer Persia, now the Japanese Persia Maru, was transferred to the position in charge of the liner Paraiso plying between San Francisco and South America.

L. J. Tappan and W. J. Erich, two old timers are holding down the good ship San Ramon. We now expect a mark set for steam schooner men.

E. T. Jorgensen until recently relieving at the Hillcrest station has been assigned temporarily as assistant on the Wilhelmina.

O. Mock, a member of our construction department, was transferred to the steamer Herrin, Jan. 21.

R. H. Brower was assigned in charge of the new ship Eurana, operating for the Eastern Division.

C. F. Trevatt joined the steamer Bradford during January. This vessel is also operating for the Eastern Division.

SEATTLE STAFF CHANGES

W. Chamberlain, who left the Columbia for a vacation, is being relieved by G. W. Wodbury.

On the City of Seattle, changes have come fast. A. F. Lange, previously of the Humboldt, was assigned to her for a time but later relieved W. J. Manahan of the Juneau, when Manahan departed for Jualin. E. J. Edmonds left the City of Seattle on a vacation, and F. Wilhelmin transferred from her to the Spokane.

C. G. Hallet took over Lange's key on the Humboldt.

J. A. Buchanan has returned to duty at Ketchikan. R. F. Harvey who relieved him there, has been transferred to the Spokane.

H. Mac Gowan has the tug Oneonta from J. J. Ritter, resigned.

C. S. Holbein has been assigned to the Paulof.

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