

### WIRELESS UP TO DATE.

To the Editor and all those interested:—I enjoy a critical discussion on "present day" wireless, but to argue with a critic who seems unable to get away from conditions of a year or more past, is in the nature of lost motion. Still, here goes,—and it won't be the first half hour I've wasted.

Yes, I knew the Editor had Subscriber's name, but while his letter was addressed to the Editor, it was meant for the public, and it was not of such importance that he could expect all who read it to run to the Graphic office to learn the authorship, so he should have signed it. I signed my answer to save those interested that trouble. I do not need to advertise; Subscriber is doing that for me, for which I am duly grateful.

It will be noticed that he still does not give us the authority for the 'report' published. If it is from one of the "strongest New York Banks," why keep it from us? Or did I come pretty close to it when I stated my suspicion that it was a stockbroker's letter, and therefore worthless? Will he kindly give us the name of this 'bank' in his next article?

His argument regarding the \$20,000,000 cable to Honolulu defeats itself. True, Honolulu is but a way station on the cable in question, which runs on to the Philippines, Guam and China. Whether the population is civilized or savage, black, brown, yellow or variegated in complexion cannot alter the fact that that section of the cable between San Francisco and Honolulu cost \$20,000,000, and is paying big dividends. The percentage of white or civilized population is much smaller in the Philippines and Guam or China than in Hawaii, yet the cable pays big profits on the immense cost. The Commercial-Pacific Cable Co. didn't lay that cable to further "the brotherhood of man," or to tie a string to the "yellow peril." Like the '15th Amendment' and "the flowers that bloom in the spring,"—"Race, color or previous condition of servitude" have nothing to do with the case so long as profits are earned. Wireless stations are being built in all these isolated places, which would not be the case unless communication with each other was a certainty.

The number of ships in the American Merchant Marine has

nothing whatever to do with the number of ships we will equip with wireless apparatus. The bill in Congress is couched in the following terms:—"It shall be unlawful for any common carrier employing steamships used in transporting passengers between a place in any foreign country and a place within the limits of any State, Territory or District of the United States, or between a place in one State, Territory or District of the United States bordering on the Atlantic, Gulf or Pacific seaboard, and a place in any other State, Territory or District of the United States bordering on the Atlantic, Gulf or Pacific seaboard, to use any steamship of 1000 tons register or over not equipped with operative wireless telegraph apparatus capable of sending and receiving signals over a distance of 100 miles. Sec. 2.—That a register, enrollment or license shall not be granted, or other papers issued by any collector or other chief officer of customs to any steamship subject by law to inspection under this title, until such steamship is equipped with an operating wireless telegraph station capable of sending and receiving signals over a distance of 100 miles."

Can Subscriber see from this that on passage of the bill into law, no steam vessel, whether foreign or American, liner or coaster, of 1000 tons or over, may enter or leave an American port without wireless equipment, under heavy penalties? Pressure from Insurance Companies, together with reduced insurance rates, will force freight vessels to install equipment, also. The "other countries" who have "their own systems," may be counted on the fingers of one hand. There are many different systems, so-called, and most of these which are of value, we own and control. As stated in my previous letter, only two companies are developing or doing commercial business, having very much superior systems. The rest of the "systems" are obsolete. We have contracts with 12 foreign governments, and ships of those countries will use our equipment, also. Marconi is our only competition, and even he does not compete on this continent, so you could notice it. The brokers may tell Subscriber a different story, but he shouldn't believe all the brokers say. That he may get absolute facts, I refer him to the Supt. of Documents, Government Printing Office, Washington, D. C., for a list of stations.

That Bellingham can talk to Portland only at night is no proof that overland wireless is

not a success. If Subscriber or his informant knew anything about wireless stations, they would know that the distance a station can send, either day or night, over sea or land, is merely a question of the power of the instrument. Bellingham is the lowest power land station which we install, namely, 1 Kilowatt, and is not intended to work long distances, which are covered by relaying, as the wire lines do. Bellingham can relay through Seattle, a 5 Kilowatt station, and reach any station on the Pacific Coast. Our high power stations are installed several hundred miles apart, with weaker ones between;—on the same principle that great railway systems run fast through trains between the large cities, and slow accommodation trains to serve the smaller towns. As to successful overland work, I submit a few clippings from the daily press:—

From "Seattle Post-Intelligencer," Nov. 8, '08.—"Overland communication of 2300 miles effected, from Navy Yard, Puget Sound, to Magdalena Bay." (This was between Government stations. Draw a line on the map and see if it is overland.) The fact that we are at present installing 425 stations throughout the U. S. ought to be sufficient answer as to the practicability of overland wireless. Very likely Subscriber don't believe this. Well, he'll have to, before very long, for we are building at Salem and Tillamook, the site at Roseburg has been selected, and work begins at once. Then comes Eugene, Medford, The Dalles, Pendleton, Baker City, etc., and I have lately been urging the claims of Newberg for a station.

Here's a little more for him.—From "Oregonian," 10-25-08.—Seattle, Oct. 24.—The Army wireless signal service stations in Alaska, at Eagle City, Circle City, Fairbanks and Fort Gibbon are handling the commercial and press matter ordinarily carried by the land wires with as much promptness as when the land wires were in use." From "Oregonian," 10-29-08.—Seattle, Oct. 28.—Advices received at the local signal office this afternoon show that the signal service wireless stations in Alaska have made another record, removing all doubt as to the feasibility of sending wireless messages overland. Fort Gibbon, at the junction of the Tanana and Yukon Rivers, several hundred miles inland, is receiving messages from Nome and St. Michael, 500 miles distant, with many ranges of hills between the two stations. A message sent by the

steamer "Northwestern," 1100 miles west of Cape Flattery, to the United Wireless station at Cordova, was copied. The message traveled about 1200 miles in an air line over two high ranges of mountains, capped with snow."

From "Portland Telegram," 11-8-07.—"Washington, D. C., Nov. 8.—The new wireless telegraph stations at Fairbanks and Circle City, Alaska, are ready for operation, according to advices just received by Brig. Gen. James Allen, Chief Signal Officer of the Army. There are wireless stations in operation at Nome and St. Michaels, a distance of 107 miles across Norton Sound. The station at Nome will be enlarged, and a station at Fort Gibbon and another station will be constructed at Valdez by the Navy Dept., and these will be operated with naval wireless stations at Sitka and Cape Flattery. It is likely that stations will be constructed at Eagle City and Gulkana in order to replace the land lines between those two points, which traverse the roughest country in Alaska. The system between Nome and St. Michaels has been operated without a break for the last year, and has been used for commercial business. These stations have demonstrated the fact that the wireless system in Alaska is far more feasible for the transaction of commercial business than are the land lines." From "Seattle Post-Intelligencer," 9-19-08.—A dispatch from Valdez, Alaska, received at the U. S. cable office yesterday states that an unusually heavy blizzard has been raging there for two days, causing interruption in service with several stations. Linemen are out at every station, making repairs. Just before the wires went down, a message was sent from the several wireless stations in Northern Alaska, stating that satisfactory tests had been made, and connections established among all."

I cite these instances because they are Government reports, and cannot be denied, unless Subscriber wants to take issue with the Chief Signal Officer of the United States. The stations in Alaska are of DeForest equipment, which patents we own.

The claim that anyone, schoolboys included, will be able to intercept wireless messages with amateur or experimental stations shows that Subscriber is unable to look into the future, and learns no lessons from the past. It is just as easy, and far less expensive, for a boy to buy a set of Morse telegraph instruments, which he can experiment with all he likes; but what happens to