NEW LAW OF NATURE FOUND BY INVENTOR OF THE PERFECT RADIO

Puzzle of Static Electricity Has Been Solved by R. A. Weagant—Invention in Use by Allied Governments During the War Will Be Given to the World When Peace Is Finally Concluded—Great Saving of Time and Money.

New York.—"I have discovered a new law of nature."

Without hearing the rest of a modest inventor's ambitions think what that means. That is a tremendous declaration. It is epochal. Not since the day of Sir Isaac Newton, who was credited with the discovery of the law of gravitation, has a real law of nature been added to the world's collection of marvelous scientific phenomena. One may expectantly look for the eighth wonder of the world.

Newton may have been a modest man. Perhaps all great inventors are modest men. The fact that most of them have been unfortunate in being ill rewarded for their labors might indicate a bashful nature. No one, who has seen and talked with Roy A. Weagant, chief engineer of the Marconi Wireless Telegraph company, will dispute the fact that he is modest. He is the young man who, after ten years of scientific research into wireless phenomena, has solved the puzzle of static electricity and by means of a new law of nature has eliminated that bothersome element from the atmosphere so that wireless has become a perfect means of communication for extremely long distances. His invention has already been in use by the allied governments during the war and he is ready and anxious to disclose the "new law of nature" to the world as soon as certain restrictions are removed by the conclusion of peace.

"A Simple Matter."

"It is a simple matter when once you find the governing law," said Mr. Weagant to a reporter. "Radio experts have looked for it for years and some of them have claimed to have discovered it, but they were either fakers or had made honest mistakes in scientific judgment. I have got it. That fact can be easily demonstrated and will be at the proper time. If I should describe the details of the apparatus it would be a simple matter for radio engineers to recognize the new law. We feel constrained not to divulge the secret generally until peace has been concluded."

Mr. Weagant said he was positive the Germans had not made the discovery themselves or had any knowledge of his discovery. He declared that only a few days ago he was listening to wireless messages being sent to Germany and that the German operator requested the sender to repeat the messages and use more power. That would not have happened if the Germans had known how to utilize the new method, the inventor said.

"Static" has been the hoodoo of wireless telegraphy ever since Marconi convinced a doubtful world of the actuality of the new method of communication. Little buzzings and big clatterings along the air currents, particularly on moist days, have persistently interrupted the clear flow of the wireless messages and made their reception practically impossible. The inventor described the sound in the instruments as similar to that made by some one throwing a handful of pebbles against a glass window. On cold, snappy days the adverse atmospheric condition has not been so bad. But the trouble was always the worst from June to October.

A Prophetic Decision.

Mr. Weagant recalled a decision in the United States district court on January 7, 1916, in which Judge Julius Mayer made a prophetic announcement in regard to the solving of the static problem. It was in the case of ... vs. the Atlantic Communication company ... where the issue involved the invention of a new transmitter for wireless apparatus. Referring back to the "state of the art" of wireless communication on July 1, 1907, a date figuring in the ..., Judge Mayer said:

"On that date there were just two possibilities: (1) To annul, exclude, eliminate static; or, (2) to improve the wireless note by method of apparatus, or both, so far beyond the art as to constitute invention. The first has not been done. He who shall accomplish that need have no fear of the fate of his invention."

So the radio operators kept on searching for that principle which Mr. Weagant has at last found. We have his word for it, and the word of Edward J. Nally, vice president and general manager of the Marconi company, and the fact that the perfected wireless has been used by the government during the war, although not yet officially announced.

It has made the bridging of the North Atlantic by wireless, always the hardest route for aerial messages, according to Mr. Weagant, easy. It has eliminated long distances, the most important goal radio engineers have striven for.

"Before the war we were limited to six or seven hours' communication a day across the Atlantic and across the six thousand mile stretch from San Francisco to Japan," said Mr. Weagant. "Now we can use the wireless continuously. Before the war it would have been impossible to get all the 'news' which the German wireless tried to scatter over the world. Now we can get it all. I am not privileged to say to what extent our discovery has figured in the war, but I can say in a general way that almost everything the Germans sent out bearing on the question of peace was received.

Will Save Money.

"A considerable saving of money will be effected. In some sending stations the power needed is cut in half. Instead of steel masts 400 feet high as some are, and cost $18,000 apiece, a mast the height of a telephone pole is enough for receiving."

The inventor said that the trouble with most of the radio experts who had been experimenting with "static" was that they had given up too soon. Many of them came to the conclusion that the solution of the problem was impossible. They regarded "static" as a thing erratic, incalculable, wayward, willful, a law unto itself.

The turning point came when the Marconi engineer decided that "static" was a natural law, rational and following a definite system, that only needed to be understood to be conquered. That was in 1908. Since that time Mr. Weagant has devoted the better part of his energies to ascertaining just what the properties of this law were. The preliminary work was done largely at experiment stations in New Jersey and Miami, Florida. In 1916 government assistance was enlisted and the experiments took on a far more definite character. By the time this country was ready to enter the war the work had reached practical completion and patent application claims had been allowed by the United States patent office. From that time forward the problem has been one largely of perfection of detail.

"All I did was to set out to discover the new law of nature and make it work for man, and that's all I have done," said this modest inventor. "I set up all sorts of hypotheses and constructed all sorts of apparatus, and when one theory wouldn't work I tried another. It was like failing in 999 ways and finding what you are after on the thousandth attempt."

Of course the question came up again as to just what the inventor had found out, what the new law of nature was. And what millions of laymen and a few thousand scientists, who were taking the attitude of the Missourian, wanted to be shown. It was stated that some of them had publicly doubted the solving of the static puzzle. The inventor smiled and shrugged his shoulders.

"That's quite natural," he said. "It sounds big to make the announcement that we have perfected wireless after all these years, but I know we are safe. I would like to tell the whole story, but I am restrained until the peace pact is signed. I don't expect people, including scientific men, to believe it until they use it. It is like flying—people would not believe it could be done until they actually saw it done."

Mr. Weagant asserted that they were not seeking a monopoly of the invention, and said the British and French governments already were familiar with him while he was acting for the United States government. He said that reasonable protection would be secured, but that he intended to give his secret to the world, because of the great importance of having the best communication facilities possible everywhere.

Mr. Weagant was born in Canada, but his parents moved to Vermont when he was a baby, and he has made his residence in this country most of the time since then. He studied at Stanstead college and at McGill university, where he received the degree of bachelor of science. He worked for the Montreal Light, Heat and Power company, the Westinghouse company at Pittsburgh, the De Laval Steam Turbine company, the National Electric Signaling company, and in 1912 joined the Marconi company. He is a comparatively young man with hair slightly tinged with gray and has clear, sharp gray eyes, which reflect an active and highly trained mind. He is rather diffident and retiring, but expresses his opinions in a voice that is deep-toned and convincing.

GRATEFUL TO RED CROSS

Italian Mothers Wept With Joy at Sight of Children Returned to Health.

Rome.—One by one the mountain camps and seaside colonies of the American Red Cross in Italy are closing for the season. In cities in the north and south, in Sardinia and Sicily, mothers are welcoming their

Mother Greeting Child Returning From Camp.

children home and rejoicing in their changed appearance.

"It is amusing to watch mothers seeking to recognize their little ones," writes one of the American Red Cross workers, "and it is touching to see their delight when they at last realize that the brown, sturdy youngsters who rush into their arms are the delicate Giuseppinas and the anemic Angelos who left them earlier in the summer."

Pouring into the Rome office, the headquarters of the American organization in Italy, are letters from these mothers telling of their gratitude. They are written laboriously and painstakingly, the majority of them, each cramped character eloquent of earnest sincerity in this, the penned expression of their gratitude. Following is one of the many received:

"I, Maria Ferrario, mother of Angelo Ferrario, am overjoyed at the improvement in health of my little son. He returned from the mountain camp of the American Red Cross at Gressoney, fat and with color in his cheeks, of which he stood in much great need. I can find no words to express my gratitude for your kindness. May God protect and bless the kind benefactors who have done so much for the children of Italy's soldiers."

WANTON DESTRUCTION BY THE HUNS

This British official photograph, which was taken on the British western front before the signing of the armistice, shows the wanton destruction with which the Germans ravaged the country that they were evacuating. This one time beautiful statue in Douai was pulled down by the enemy for the metal contained therein.

TEXAS OIL INDUSTRY BOOMS

War Stimulus Results in Development of Refineries With 278,500 Barrels Capacity.

Dallas.—Under the spur of war, Texas in the last year has effected a tremendous development of her oil industry.

Today there are in operation in this state 42 refineries, with a capacity of 278,500 barrels daily. They are capable of refining double the amount of oil produced in the Texas fields last year. Fields of unsuspected volume have been opened and made to aid in keeping ships and army motors at top speed.

In the coastal region where ten refineries are in operation, the first unit of a big oil plant on the Houston ship canal is nearly completed. It is intended to have a capacity of 20,000 barrels a day and represents an investment of from $8,000,000 to $10,000,000.

MADEIRA NEAR STARVATION

Densely Populated Island Can't Get Food Because of Ship Shortage.

London.—According to advices from Funchal conditions on the densely populated island of Madeira are deplorable.

Owing to the war's curtailment of steamship traffic, communication with the island is reduced to only one steamer monthly, causing an industrial paralysis and cutting off to an alarming extent the importation of foodstuffs.

Thousands of casks of wine and great quantities of wicker work and hand-made embroideries have accumulated at Funchal, awaiting shipment.

With the stoppage of industries the inhabitants are unable to earn enough money to keep themselves properly fed. Normally Madeira imports 90 per cent of her foodstuffs.

JOY OVER ARMISTICE CAUSES WOMAN'S DEATH

Edwardsville, Ill.—The death ... of Lena Wiemers, eighty, ... believed to have been caused ... overjoy at the signing of an armistice with Germany. Mrs. Wiemers, who was born in Germany, often spoke of the return of her boys in France.

PRINCE NOW FIXES STREETS

Former Russian Nobleman Is Now a Day Laborer and His Wife ... in Want.

New York.—Intimate news of the conditions to which former members of the Russian nobility have been reduced is conveyed in ... from Hugo Blackwell ... Blackwell ... best runners ... years in Petrograd said ... court favorite ... of that.

to Helsingfors. A letter from him received here says:

"One of my closest friends saw a man working on the streets. Just think then how astounded I was to find that the worker was my friend Prince Putiatin, the husband of Marie Pavlovna, the former wife of Prince Wilhelm of Sweden. ... "

Joe Atkinson,
Auctioneer.