

The Latest Conquest of Space

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them, and thus obviate one of the weak links in railroad manipulation. In connection with the wireless telephone can be employed a new signal device known as the "aerophone."

This instrument is devised to give instant warning of the distant approach of other trains from any direction. Ships can likewise be warned of the approach of other vessels in fogs, storms, or at night, or of the proximity of dangerous coasts.

Several hundred passenger and freight boats on the Great Lakes are now being fitted with radiophones, the system having been inaugurated last May. Wireless telephone stations are now operating at many points along the shores of the Lakes. It is possible for the boats to talk with one another and with any of the shore stations while en route.

So great an authority as A. Leo Stevens, instructor in aeronautics to the United States army, has declared that the development of the airship can only follow the utilization of the wireless means of communication. Looking to the future, he has recently recommended to the government laws to be passed, requiring radiophones on every airship. Disastrous conditions can thus be avoided, and should accidents occur in desolate places, the aeronauts will be able to summon aid.

Count Zeppelin's latest airship was so equipped, and he was constantly in touch with the German officials at headquarters during the trial trip through the air.

The matter of news service by radiophony is an accomplished fact. On May 13th, news distributed by this means was successfully accomplished from a bureau in Chicago to the editorial offices of the Journal, in Milwaukee, Wisconsin. This service is to be permanent, and has since been extended to newspapers in other cities in the Northwest.

Nowadays in order to telephone a man one must call up a certain telephone located in a certain place. Unless the man is there you cannot talk to him. That will all be changed in the future. One can foresee the time when the man on the street, on the trolley car, or wherever he may be, will carry in his pocket an audion or receiver, listed under his own number and tuned to an affinity, different from that of any other audion. Should someone call that number, immediately the audion will buzz a warning. True, the man will not be able to telephone without connection with a transmitted apparatus. But these will be found in all vehicles, and even on street corners, as letter-drops are now. All he will then have to do will be to connect his receiver with the transmitter, drop a coin in the slot, and communication will be set up immediately.

A strong argument against the wireless telegraph was that outsiders might easily pick up the messages transmitted. This was true so long as all instruments were tuned to a single key. But a certain recent invention applied to the telephone has changed all that. Central will be able to change the tune for different subscribers as often as there are numbers

in the telephone directory. It is done exactly as a violinist tunes his instrument—by tightening or loosening a device which in infinitesimal degree increases or decreases the vibration as the impulses are set forth.

It may all sound visionary enough, but not so far-fetched as did the prognostications concerning the wire telephone that were made some thirty years ago. Even the wireless telephone advocates do not claim that all these promises will come to pass in a day. They contend, however, that within twenty years the wireless telephone will have entirely superseded the present systems, and for the very good reason that it will be cheaper to install, maintain, and operate. And they claim that it will do things that the wire telephone cannot do—things that will be as necessary in the future as ordinary telephoning is today.

MANITOBA NOXIOUS WEED COURSE

Principal W. J. Black, of Manitoba Agricultural College has issued the following regarding the noxious weed course to be held at that institution June 14 to 17:

It is deplorable the amount of money which is annually lost through the prevalence of noxious weeds. The department have entered upon educative methods trusting that these will supplement the harsher measures which the department has been obliged to put in force. It is hoped the noxious weed inspectors will take advantage of the opportunity to attend this free course in the Manitoba Agricultural college.

Lectures and demonstrations will be made as practical as possible. They will commence each morning at 9 o'clock, and with the exception of one hour for lunch will continue until 4:30 in the afternoon of each day. The first lecture will be given at 9 o'clock on the morning of Tuesday, June 14.

Following are the subjects of the lectures:

"Identification of weed plants at different stages of growth." "Identification of seeds of common weeds." "Proper and common names of weeds." "Extent to which, and reason why, one weed is more serious than another." "How green, or how soon after ripening will seeds of the worst weeds germinate." "Means by which weed seeds are conveyed from one place to another." "When are crops so infested by weeds, as to require destroying." "Best means of, and proper time for killing weeds." "Results obtained by spraying weeds with chemical solutions." "Interpretation of the noxious weed act from a legal standpoint."

Plants specially grown and collected, and weed seeds collected for the purpose, will be used in the various classes held to consider methods of identification. A conference will be held for consideration of the problems met with by the inspectors in the discharge of their duty. Time will be set apart for free discussion.

In carrying out the above program C. H. Lee, professor of botany, will have charge of the instructional and demonstration work in identification, and S. A. Bedford, professor of field husbandry at the agricultural college, will have charge of the work dealing with the best methods



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of eradication and control of weed pests. The lecture on the interpretation of the noxious weed act will be given by E. M. Wood, deputy municipal commissioner for Manitoba.

Those desiring to attend should signify their intention by writing the agricultural college before June 10.

WHEAT KING NIPPED

James A. Patten, the most daring operator that the Chicago board of trade ever has known has fought his last battle in the world's greatest wheat pit, and has gone down to defeat before the onslaught of his old-time enemy, J. Ogden Armour.

J. Ogden Armour, quiet, mild-mannered man of few words, yet of the strongest determination, one who has nursed the blows that he has received in the wheat pit at the hands of Jas. A. Patten in the past, and has said nothing, knows how sweet is revenge.

J. Ogden Armour, with all of his millions behind him, in the parlance of the wheat pit, "has been laying for 'Jim' Patten for a long time."

Thursday, in one of the wildest and most exciting sessions that the board of trade has seen in many months, J. Ogden Armour smashed the "Wheat King's" corner in wheat for the September delivery. When the gong sounded at the close of the session, Patten was a loser by something like \$2,000,000. Armour had added at least \$2,000,000 to his already plethoric bank account. The old scores, in a measure, had been evened up and wiped out by the exciting history making day on the board.

One year ago, almost to the day, James A. Patten was bringing to a close the most spectacular deal in wheat that the board of trade had ever known. The deal made Patten a fortune, variously estimated from five to seven million dollars. Armour was a bear in the May wheat deal of 1909; Patten was a bull. Armour's losses were estimated at the time to be something like \$2,000,000.

Patten recently resigned his seat in the Chicago board of trade, and will soon retire from the pit.

CANADA RANKS FIFTH

A statement prepared by the census and statistic branch of the department of agriculture shows that among wheat producing countries of the world Canada now ranks fifth. In 1908 Canada ranked tenth. Last year the wheat production in Canada is given as 166,744,000 bushels, as compared with 112,434,000 bushels in 1908. Last year the wheat production by countries was as follows: Russia, 786,472,363 bushels; United States, 713,286,923 bushels; France, 361,030,000 bushels; British India, 253,592,377 bushels; Canada, 166,744,000 bushels; Italy, 153,711,230 bushels; Spain, 144,511,581 bushels; Germany, 138,399,477 bushels; Argentina, 133,581,007 bushels; Hungary, 143,363,287 bushels; Australia, 82,348,514 bushels; Great Britain and Ireland, 64,545,212 bushels. In 1908 the order of precedence in respect to production was as follows: United States, Russia, France, British India, Hungary, Argentina, Italy, Germany, Canada and Australia.

DESTROYED FRUIT TREES

The provincial fruit post inspector held a bonfire at Vancouver, destroying thirty thousand insect-laden trees from Ontario, the United States, France, Belgium, Germany and Holland, part of one million trees shipped to British Columbia this winter. There were enough germs to have horticulturally infected the whole province, but no one tree escaped the British Columbia inspection which is said to be the most rigid of any country in the world. British Columbia is practically immune from injurious orchard pests as a result. Inspectors from a recent tour of Okanagan and Kootenay could find no trace of the mischievous codling moth or San Jose scale and report that from Okanagan alone at least one thousand carloads of perfect fruit will be shipped this summer and fall.

Wireless telegraphy has saved the lives of the crew of another ill-fated steamer on the Atlantic. When a truly wonderful invention is once in use we find it absolutely indispensable.



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