

Every Tree a Wireless

Potential Telegraphy in Nature's Growth Is Revealed by Army Officer

Discovery that every tree is a potential wireless tower was announced recently by Major General Squier, chief signal officer of the army, revealing another war secret and telling the story of how, while hostilities were on, the American army, with a string of stations using tree tops as antennae, read messages from ships at sea and the principal European radio stations.

General Squier made his disclosure in a paper read before the Physical Society of America, meeting in Washington, D. C., at the United States bureau of standards.

Afterward he took the scientists out into the woods near the bureau and demonstrated a portable field laboratory erected there for experiments in development of the discovery.

He showed how nature's wireless tower was nothing more than a tall tree, preferably eucalyptus, with a small wire netting spread below and an insulated wire hanging from a spike driven near the top.

"From the moment an acorn is planted in fertile soil," said General Squier, "it becomes a 'detector' and a 'receiver' of electro-magnetic waves, and the marvelous properties of this receiver, through agencies at present entirely unknown to us, are such as to vitalize the acorn and to produce in time the giant oak. In the power of multiplying plant cells it may indeed be called an incomparable 'amplifier.'"

MY CATBIRD

Prime cantante!
Scherzo! Andante!
Piano, pianissimo!
Presto, prestissimo!

Hark! are there nine birds or ninety and nine?
And now a miraculous gurgling gushes
Like nectar from Hebe's Olympian bottle.
The laughter of tune from a rapturous
throatle!
Such melody must be a hermit thrush's!
But that other caroler, nearer,
Outrivaling rivalry with clearer
Sweetness incredibly fine!
Is it oriole, redbird or bluebird?
Or some strange un-Auduboned new
bird?

All one, sir, both this bird and that bird:
The whole flight are all the same catbird!
The whole visible and invisible choir you
see

On one little twig of yon green tree,
Flitting feathery Blondell!
Listen to his rondell!
To his lay romantic,
To his sacred canticle,
Hear him blithe,
See him titling,
His saucy head and tail are fluttering
While uttering
All the difficult operas under the sun,
Just for fun!
Or in tipsy revelry,
Or at love deviltry,
Or, disdainful his divine gift and art,
Like an imitable poet
Who captivates the world's heart,
And doesn't know it,
Hear him titt!
See him titt!

Then he suddenly stops,
Peers about, firts, hops,
As if looking where he might gather up
This wasted ecstasy just split
From the quivering cup
Of his bliss overrun.
Then, as in mockery of all
The tuneful spells that e'er did fall
From vocal pipe, or evermore shall rise,
He snarls, and mew, and flies.
—William Henry Venable.

\$15,946,000 Lent to Farmers During the Month of March; Total of 185,643 Ask Loans

During March \$15,946,000 was lent to 4,630 farmers by Federal Land Banks on long-time first mortgages, according to the monthly statement of the farm loan board. The Federal Land bank of Omaha leads in amount of loans closed, \$4,565, with the Federal Land bank of St. Paul running second in amount, \$1,893,200.

The other banks closed loans as follows: Houston, \$1,838,000; Spokane, \$1,528,000; Louisville, \$1,142,000; St. Louis, \$1,125,000; Columbia, S. C., \$923,000; Wichita, \$775,000; New Orleans, \$741,000; Berkeley, \$547,000; Springfield, Mass., \$525,000, and Baltimore, \$336,000.

On April 1 the total amount of mortgage loans since the establishment of the federal land banks was \$198,600,000, with 79,949 borrowers. Altogether 185,643 have applied for loans under this system, aggregating \$492,000,733.

Gets 125 Bobcats and 200 Coyotes in Three Years

With a record of 125 bobcats and 200 coyotes to the credit of a North Yakima (Wash.) government trapper operating in the mountains and valleys of that region, it is estimated by ranchers that he has saved them 24,000 head of sheep and 80,000 game birds in the past three years. Basing their estimate on the known destructiveness of these wild pests, the money value of the stock saved is computed by them at \$240,000. The fur of the beasts killed or trapped was worth \$10,000.

HERE AND THERE

Fools begin a lot of things that wise men finish.

Cash is the password to many a secret organization.

A man of ripe experience is too wise to monkey with green fruit.

Every time a battle is fought another scrap of history is made.

When a man is up and doing, much depends on what or whom he is doing.

Don't get the idea that distance lends enchantment to man's view of pay day.

Ignorance of English Is Cause of Many Accidents in the Mining Districts

That the inability to read and understand English places the foreign-born in danger of his life is the striking fact brought out in a recent statement of mine fatalities by the bureau of mines, department of interior. The facts offer a strong argument for Americanization.

The rate of accidents among the non-English speaking miners is not only greater in all the great mining districts of the country but the increased ratio is uniform in all districts. The bureau of mines considers that this demonstrates clearly that the inability to read warning signs, to comprehend fully the company's instructions and to understand their foreman, places an unnecessary hazard upon the foreign-born.

The figures given show the difference in the rate of serious accidents in the mines among the American-speaking and those from the countries of continental Europe, almost entirely non-English speaking.

In Pennsylvania anthracite mines 43 per cent of the employees are English-speaking and this number is charged with only 28.8 per cent of the fatalities, whereas the other 56 per cent sustained 71 per cent of the fatalities. This is a comparative ratio of 600 to 1,288 against the non-English speaking.

In Pennsylvania bituminous mines the ratio is 771 to 1,123 and in West Virginia district, 790 to 1,424. In Indiana the ratio is not so great.

Director Manning of the bureau of mines concludes his report with this impressive statement:

"Had the fatality and injury rate for the English-speaking American been maintained throughout the three groups, there would have been a saving of 716 fatalities and 900 very serious injuries, a strong argument for Americanization and education of the miner."

Mother's Cook Book.

The heavier the cross the heartier the prayer; The bruised herbs most fragrant are; If wind and sky were always fair; The sailor would not watch the star; And David's songs had ne'er been sung if griefs his heart had never wrung.

Small Cakes for Occasions.

The small cakes and cookies which will keep indefinitely are the kind we like to serve, for they are usually, if spiced and plenty of fruit is used, better flavored if allowed to ripen.

Rocks.

Cream a cupful of shortening, add a cupful and a half of sugar, three eggs, a teaspoonful of cinnamon, half a teaspoonful of allspice, a teaspoonful of soda dissolved in two tablespoonfuls of water and a cupful each of nuts and dates, cut fine; add two and one-half cupfuls of flour and drop by spoonfuls on a buttered sheet. Bake in a moderate oven.

Oatmeal Cookies.

Brown two cupfuls of oatmeal in the oven until a good brown, then put through the meat chopper; cream one cupful of shortening with a cupful of sugar; add salt to taste, two eggs, a teaspoonful each of cinnamon and soda and seven tablespoonfuls of thick sour milk, two cupfuls of flour. Add a few nuts and raisins and drop by spoonfuls on a buttered sheet. Bake in a moderate oven. This recipe makes about sixty small cakes.

Nut Cookies.

Beat the yolks of two eggs until thick, add a cupful of brown sugar gradually, a cupful of nut meats, then the whites of the eggs, beaten stiff, and six tablespoonfuls of flour and a little salt; mix well and drop from the tip of a teaspoon on a buttered sheet. Bake in a moderate oven.

Coconut Cream Cookies.

Beat two eggs until light, add a cupful of sugar gradually, a half cupful of shredded coconut, a cupful of cream and three cupfuls of flour, sifted, with a teaspoonful of salt and three teaspoonfuls of baking powder. Chill and roll out one-half inch thick. Shape with a small round cutter and bake in a moderate oven.

Sunshine Cookies.

Take one cupful of sugar, one-third of a cupful of butter or sweet fat, half a cupful of sweet milk, two teaspoonfuls of cream of tartar and one teaspoonful of soda, sifted with two cupfuls of flour. Roll out very thin and place on baking sheets; drop on one teaspoonful of the filling and cover with another cookie. Bake in a moderate oven.

Filling.

Chop or cut with a scissors one cupful of raisins; one-half cupful of sugar is added, the juice of half a lemon, one-half cupful of hot water and the lemon rind, grated, if liked. Cook until smooth and thick. Dates with raisins may be used, or a few stewed prunes, dried apples well seasoned, or any other stewed dried fruit that is rather thick.

Nellie Maxwell

Boric Acid for Eyes.

If the eyes are red use boric acid in a wash for them, using a pinch of the powder in the eye cup. This is a good treatment for granulated lids which cause inflammation of the eyes.

CLEVELAND INDIANS PROUD OF CATCHERS STEVE O'NEILL, NUNAMAKER AND THOMAS



The Cleveland Indians believe they have the best backstopping lineup in either of the major leagues. The trio are Les Nunamaker, who was obtained from St. Louis for Josh Billings; Steve O'Neill and Chet Thomas.

Nunamaker is regarded as a steady player, good behind the bat and still better with the bat. O'Neill is regarded as the most dependable catcher in the game today, always on the steady grind, never slumping into an "off day."

Chet Thomas, who came to the Indians about the middle of last season overweight and chunky, is showing off in fine style and his mates are betting on big things from him this season.

JOHNNY LAVAN WILL RETURN

Former Shortstop of St. Louis Browns May Change Mind About Retiring From Game.

Lieut. Johnny Lavan, surgeon on board the U. S. S. Mississippi and formerly shortstop of the St. Louis Browns and Washington Senators, may change his mind about retiring from baseball.

The ever-popular little infielder saw the opening game at the Polo grounds and became so enthusiastic he informed his friends he probably would return to the diamond when his injured ankle heals.

Johnny was all prepared to go to the St. Louis Cardinals in a big trade, by which the Giants were to get one of the Mound City catchers, but he



Johnny Lavan.

sustained a fractured ankle in Cuba and the deal collapsed. "It's going to be a great year for baseball," said the young surgeon, "and I'd like to get back into the game."

PITCHER LUQUE LOOKS GOOD

Former Louisville Hurler Wins First Game of Season for Manager Pat Moran of Reds.

It does not look as if the Colonels will be able to get Pitcher Luque back from the Cincinnati Reds, as the Cuban has been showing up too well. Luque had the honor of winning the first game of the season for Herrmann's club, although he only pitched to three batters. The Reds were behind when he went in and before anyone else took his place they were far ahead. He looked so good to Branch Rickey of the Cards that Rickey dared Pat Moran to offer him to the St. Louis club.

HARD HITTING COMBINATION

First Six Batsmen of New York Giants Look to Be Most Efficacious Batters in League.

Burns, Young, Chase, Doyle, Kauff, and Zimmerman. This is the order of the first six batsmen of the New York Giants and, on paper at least, it looks to be about the strongest batting combination in either of the two major leagues.

SURE WAY TO STOP FUGACIOUS TY COBB

It isn't every player who can cope with Ty Cobb. Yet in St. Louis years ago there was a quiet, modest little catcher named Paul Kritcheff, who evolved out of his own vast brain a means of circumventing the wily fugacious Ty. One afternoon Cobb was on first; as is his custom when the chance looks halfway good, he broke for second. Kritcheff, wild to make the peg, dropped the ball. Hurdledly picking it up, he slammed the pill across to third, shouting: "Get him when he comes around there!"—and, sure as fate, Cobb, trying to annex an extra base on the miscue, arrived at third, only to find the ball waiting for him in the third baseman's leathery hand!

IVAN OLSON IS MOST RELIABLE AS PLAYER

Commences His Fifth Season With Brooklyn Superbas.

Infielder Knows Baseball From A to Z and Should Prove Manager Robinson's Most Able Lieutenant—Faster Than Ever.

This is Ivan Olson's ninth season in fast company and his fifth with the Brooklyn Superbas. Olson was claimed by the Cleveland club from Portland back in 1911, remained with Cleveland four seasons, "stayed a minute" with the Cincinnati in 1915, and was waived over to Brooklyn in the midst of the 1915 season.

When Olie went back to California last September he got himself a job with an oil concern in Los Angeles. That was a sort of hiatus in his life. In other years he wintered in the Pacific Coast league or hunted or some such thing, but work—nothing doing.



Ivan Olson.

They had a ball team in that oil concern and Olie joined it, training three times a week and playing Sundays when the influenza ban was not in force. His ball playing and steady work had a remarkable effect. It put Olson in the best condition he ever was in his long career on the diamond, and that dates from 1906, when he broke in with Muskegon of the Three-Eye league.

Today, at the age of 34, when most infielders are slipping, Iry is one of the most reliable players on the Brooklyn team. He knows baseball from A to Z and should be Robbie's ablest lieutenant now that Jack Coombs has departed. He is showing the splendid effects of that winter training by his brilliant all-around work, and should continue at top speed for some time to come. His fielding is better than ever, he is hitting harder and is faster on the bases. His coaching of the other infielders and the pitchers while a game is on is another valuable asset. Iry has the distinction of being the most consistently "panned" player Brooklyn ever had, but he has thrived on the panning.

George Tyler, one of the star left-handed pitchers of the Chicago Cubs, appears to be in top form.

Patsy Flaherty of the Colonels has sent Catcher Diegen to the Birmingham club of the Southern league.

The national commission has reinstated Normal Pitt, pitcher, who quit baseball last summer "to go into business."

Early season clotting makes many spring buds, but as the pitchers round into form, the baseball totals will shrink.

Harry Harper of the Washington Americans gets the credit of being the first pitcher to win a game from the Boston Red Sox.

May of the St. Louis Cardinals was the first National league pitcher to secure a shutout in a championship game this spring.

Pat Moran's fine start in Cincinnati threatens to bring trouble to the wise old manager, for Redland bugs turn over night when defeat comes.

Honus Wagner, former Pirate star, who was offered a berth with the Louisville club in the American Association, says he will stick to his job as athletic director at Carnegie Tech., Pittsburgh.

BONEHEAD CLASSIC FOR YEAR OF 1919

All the blackboard stuff in the world can't help when such a play is pulled as came off in the Cardinals-Reds game on April 24. In the third inning with one down Heathcote on first, Hornsby hit as clean a smash as ever was poked. It was good for three bases at least. Heathcote ran as far as second, listened to Morris Rath a moment and then raced back for first. He met Hornsby on the way. Rogers passed him and was called out. And there stood Heathcote back on first base, well satisfied with himself.

BASEBALL STORIES

Cy Williams continues to pound the ball vigorously for the Phillies.

The Washington Americans are trying out a new shortstop named Davis.

The Giants certainly have a very impressive outfield as regards batting.

Joe Leonard puts plenty of pep in a game when he is working on the coaching lines.

If Johnny Lavan comes back the Washington infield should do some regular clubbing.

Outfielder Farrell of the Columbus Senators has been turned over to the Terre Haute team.

Butch Henline, Indianapolis catcher, has been sold to the Bloomington club of the Three-I league.

The Boston Red Sox have turned young Pat Shea over to Newark, but he expects to be back.

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LARRY SUTTON WITH COOMBS

One of the Best-Known Baseball Scouts Signs to Dig Up Players for Philadelphia Club.

Larry Sutton, one of the best-known baseball scouts, has signed a contract to dig up new players for the Phillies. Sutton for many years was the Brooklyn club's scout and was the discoverer of Daubert, Wheat and other noted players. He acted in a similar capacity for the Cincinnati Reds two years ago.

Sutton and Jack Coombs are old friends. The former recently recommended Leo Callahan to the Phillies, and as the latter is making great progress, Coombs decided the other day to let Sutton put on his gum shoes for a tour of the minor leagues later in the season.