

Wedding of Midgets Draws Great Crowd in Savannah



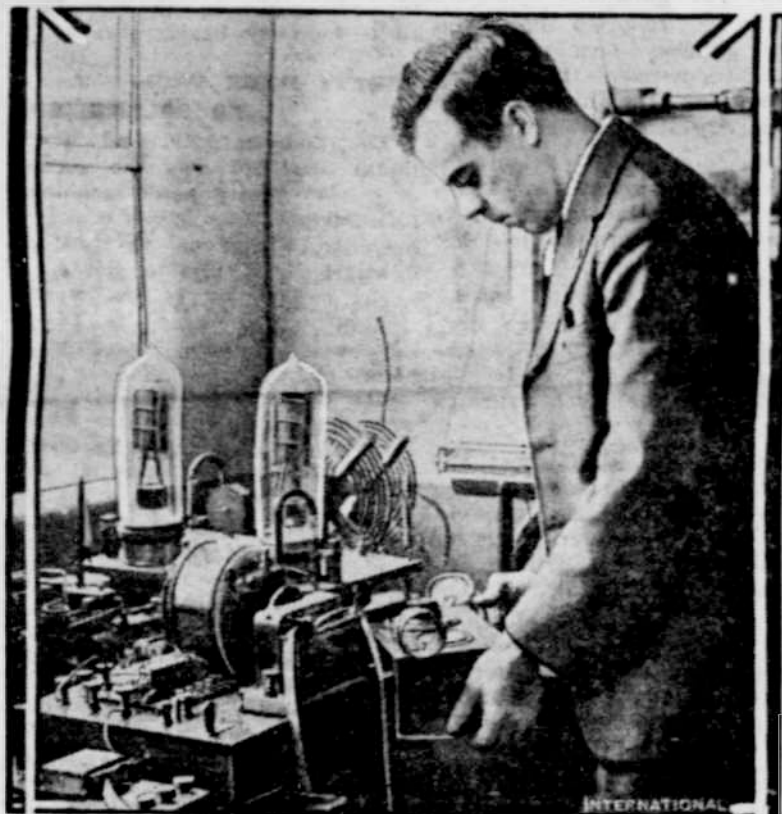
Fully twenty thousand people attended the wedding in Savannah, Ga., of Matjus Matina and Miss Marguerite Nickley, two of the world's tiniest people. The little couple were married by Mayor Hull on the bandstand in Forsyth park. The best man was "Mike," twin brother of the groom, and little Miss O'Lo, a Savannah miss of five years, was the bridesmaid. The pictures show the wedding and the newly-weds at home.

Gathering Mileage and Photos All Around the World



This is the automobile in which Mr. and Mrs. F. M. Richards are making a trip around the world, photographed in Washington, the home of the tourists. Their journey began in Los Angeles June 1, 1919, and will end there in 1931, when they will have covered more than 500,000 miles. Their mileage already exceeds 350,000.

To Keep in Touch With Byrd



Above is pictured E. A. Brown, chief operator at Station 2CV, Richmond Hill, L. I., at the apparatus which will pick up and relay calls and messages received from the navy Arctic expedition headed by Lieutenant Commander Byrd. This apparatus will also be able to repeat calls to the flyers in the Far North.

Young Roosevelts Home Again



The children of Theodore Roosevelt happily back home at Oyster Bay, Long Island, after their trip around the world to India to meet their father.

LITTLE BITS OF INFORMATION

Brazil has greatly developed its manufacture of chemicals in the last five years.

The production of tobacco has been abandoned in Denmark, where it was begun a few years ago with fair success.

Chicago architects have planned a 4,000-room hotel to be built on top of a 21-story office building in that city.

Women of royal rank in India wear facial decorations to indicate their caste.

The main mast of a radio tower erected in England for sending messages to India and Australia is 820 feet high.

A new coloring ingredient for concrete is claimed to increase its hardness and make it more resistant to moisture.

HEADS WALTONIANS



Charles W. Folds of Chicago who was elected president of the Izaak Walton League of America to succeed Will H. Dilg, who had held the office for the four years of the organization's existence. The election was the climax of a hot fight against Dilg in the convention in Chicago.

BUILDER OF ROADS



As chief of the bureau of public roads of the United States Department of Agriculture, Thomas H. MacDonald heads the federal engineering force which, co-operating with the state highway department, is building the federal-aid highway system at the rate of 10,000 miles a year.

Only Recognized Metal

Gold is the only metal which is made into coins by the United States government for anyone who deposits bullion at the mint or assay offices. All other coins are made from metal purchased from time to time for that purpose as congress may direct.

Uninformed

That English critic who thinks America produces no first-rank literature evidently doesn't read the ads.—Duluth Herald.

GOOD ROADS

GENERAL TYPES OF HIGHWAYS IN USE

One of the most remarkable features of the gigantic road building program this country is engaged in is the diversity of road types adopted to meet varying conditions of traffic, location and available funds. The adoption of various types of roads marks the severance from old world construction which has always held to one type of road; and ushers in a new era of road building where the road is adapted to the conditions it will be called upon to meet.

Generally speaking the present-day plan advocates the construction of the highest type of road possible, keeping the road, however, within the boundaries of its possible earning power. Roughly, there are four types of roads now in use. These are the graded but unsurfaced roads, the lighter type surface with natural binder, the lighter type surface with artificial binder and the base type.

The mileage of roads in the country, some 3,000,000 miles, is so great and the traffic over many miles so light that building hard-surfaced roads over more than a relatively small percentage of the total mileage will be impossible for years to come. This does not mean that our road builders are neglecting these lightly traveled stretches. These roads are being improved through grading and draining so that as little trouble as possible with mud, dust, and impassability will be experienced. In the South and some other parts of the country sand-clay roads are coming into favor, the sand, packed with the natural surfacing, forming a fairly good surface.

While this lower type of road serves its purpose with some facility, traffic of any density necessitates large maintenance expenditures. The next higher type of road, the surfaced with natural binder, then becomes necessary. In this classification are gravel, water-bound macadam, and crushed rock. These surfacings may be put on and compacted under heavy rolls, or they may be laid with a water binder. Because there is little resistance to raveling and tearing apart, traffic soon wears this type out.

The type of road composed of rock, gravel or macadam bound together with asphalt or some other type of artificial binder has found much favor on roads with only a moderately heavy traffic. In this type of road the surfacing material is laid and compacted and the binder material spread over the surface. Penetration of the binder ties the particles of surfacing together, forming a sheet which resists the wear and tear of traffic with reasonable ease.

Under careful vigilance this type of road has been found well suited to the secondary roads of the nation, but under main line traffic the maintenance is too excessive to make this type of road popular. This is especially true of roads where there is a great deal of bus and truck traffic, for the pounding of these heavy vehicles requires a hard-road surface which cannot be torn apart.

Mileage of Paved Roads in the United States

The mileage of surfaced roads in the United States is nearing the 500,000 mark, according to the bureau of public roads of the Department of Agriculture. Some time ago the state reports indicated that there were 128,847 miles of surfaced road on the state systems at the end of 1924, and subsequent reports indicated that the mileage of surfaced county roads was 339,558, making a total of 468,405 miles. While it is probable that the estimate of county roads is not so accurate as that of the state roads, the above figure is probably not too large. Since 31,541 miles of road was surfaced in 1924 by the states and counties and it is known that progress has been equally as good in 1925, it is probable that the construction season now drawing to a close will increase the surfaced mileage to more than 495,000.

Good Roads Facts

Concrete, bituminous macadam and macadam roads now form the bulk of roads being constructed and rebuilt in Connecticut.

An exchange recently said, "The question is no longer can we afford good roads, but can we afford to be without them."

Construction work has been started on the second causeway north of Ventura, reports the touring bureau of the Automobile Club of Southern California.

The need of superhighways is a crying need and must be taken seriously into account.

Many primary state highway systems are largely surfaced. But we are now facing the larger problem of handling the traffic flow which these roads have attracted.

Engineers who have devoted years to the study of modern highways have decided that the speed limit should be 50 to 60 miles an hour, with a minimum speed of 30 miles.

We have today 3,000,000 miles of highways, ranging from mere trails to the highest type of improved road. Half a million miles have some type of surfacing.

It is time business were awake to the fact that good roads form one of the outstanding factors in the building and maintenance of prosperity. Active markets and wide distribution are necessities of a healthy business world. Good roads are an absolute essential.

RADIO



Farm Radio Making Rapid Growth—There Are Nearly 1,000,000 Radio Sets on Farms in the United States.

(Prepared by the United States Department of Agriculture.)

There are nearly 1,000,000 radio sets on farms in the United States, the Department of Agriculture estimates in a report on the growth of farm radio during the past five years.

In some states, the department says, there are radio sets on 25 to 40 per cent of all farms. Estimates made by the department in 1925 showed 145,000 sets in use on farms at that time; 365,000 sets in 1924, and 553,000 sets early in 1925.

Increased power and improved broadcasting, together with better receiving sets, the department believes, "will do much to aid in establishing the permanency of the use of radio for the benefit of agriculture."

Interference among stations may gradually be eliminated, the department believes, as many of the less active stations are being discontinued, and technical improvements are being made in both broadcasting and receiving equipment. Of 1,458 radio stations of all sizes licensed to broadcast since broadcasting began, only 536 were active on January 1 this year.

Co-operative Arrangements.

The department has made co-operative arrangements with more than 100 stations for broadcasting official market news gathered by department representatives in leading shipping and consuming areas. Since the first of the year the department has made arrangements with about 60 stations to broadcast on a regular schedule four additional services dealing with general agricultural information.

Literally hundreds of stations have requested the privilege of handling the government reports, but many of the requests have had to be refused the department says, because the stations are remote from the department's market news branch offices.

"When the experimental radio market news service was announced on December 21, 1920," the report states, "those in the Department of Agriculture who were directing the new activity hardly anticipated the wonderful possibilities of radio broadcasting as we now know it. A laboratory transmitter at the United States bureau of standards on a 400-meter wave length, a few enthusiastic amateurs within a hundred miles of Washington, and a 5 p. m. schedule of about 500 words by radio telegraph, composing what was called the 'radio market-gram,' constituted the elements of the experiment."

Amateurs Were Enlisted.

"Assuming an effective radius of audibility of 300 miles about each station, licensed amateurs in the areas covered were enlisted to copy the reports and to furnish them to shippers' associations, county agents, state bureaus of markets, farm bureaus and other agricultural agencies, banks, newspapers and local telephone exchanges. A number of licensed operators offered to copy the reports. By January 1, 1922, the market reports were being relayed and broadcast by radio telegraph from seven post office stations in a chain across the country."

"During 1921, reports were furnished to three of the then very few radio telephone broadcasting stations. Since then, the service has grown by leaps and bounds until now there is practically no agricultural community in the country that is without official market reports on agricultural commodities. Well-established schedules of weather, crop and market reports

Human Ear Deceives in Judging Volume

Few people realize the enormous range of the human ear. In pitch, a good youthful ear can hear all tones from as low as 16 vibrations per second to as high as 40,000 per second. The range of intensity is likewise enormous. If we take as one the strength of the weakest sound we can hear, then the strength of the ordinary talking voice will be a million.

In estimating the relative strength of sounds, our ears deceive us. For instance, when asking people about the comparative strength of two radio sets, one often hears them say that one set is twice as loud as another. When they say that they do not understand the peculiarities of the ear. On being questioned, they agree that the strongest set behaves as if it had one more stage of amplification than the weaker set. Now one more stage of amplification represents 200 times the power output, yet it seems only twice as loud. In other words, our ears are very poor at gauging the intensity of sound. This is a very necessary condition.

are broadcast from more than 100 stations in all parts of the country."

An authentic list of broadcasting stations the country over that broadcast market and crop reports has been prepared by the department for free distribution. Requests for the list should be mailed to the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.

FOREFATHERS OF RADIO

By GEORGE LEWIS
of The Crosley Radio Corporation.

Developments in radio transmission went ahead by leaps and bounds, but the reception of signals was hampered by the lack of proper means for detecting them. Many men worked upon this problem. J. A. Fleming, for instance, invented the "valve," which was the forerunner of the radio tube developed by DeForest in this country. But the detecting device which became most popular in the early days of radio was the crystal detector, as developed by Dineen and Picard.



J. A. Fleming.

and introduced in 1906. By means of the crystal detector the received electric current is so modified that it will operate a telephone receiver.

Up to this time there had been no few radio stations that there was little difficulty about the signals of more than one station being received at the same time and "interfering" with one another. However, such difficulties were anticipated by other factors which overcame them.

The length of waves sent out by the transmitting station depends upon certain constants of the apparatus. Just as the length of a water wave depends upon the object which causes the disturbance in the water and is responsible for the waves. This is a cork dropped into a pond will send out little, short, choppy waves, while if a big ocean liner overturns, the splash it makes will be followed by giant waves of great length. By adjusting certain parts of the transmitting apparatus the length of wave that it sends out may be controlled, and by adjusting similar parts of the receiving apparatus one may control the wave-length to which it will respond. This adjustment is called "tuning."

Thus, very early in the history of radio transmitting, stations near each other were tuned to different wave-lengths, so that the operator of a receiving set could tune to any one of them.

If our ears were sensitive to changes in intensity they would either be insensitive to weak sounds or moderately loud noises would become unbearable.

The degree of the ear's sensitivity to loudness can be well illustrated by the fact that it is difficult to distinguish between two sounds, one of which is twice as strong as the other. To successfully make the differentiation it is necessary that both sounds have the same pitch, the same quality of timber, and that the comparison be rapid.

Headphones

Never test batteries with headphones. The wire on the bobbins is liable to be burned out, thus destroying their usefulness. The telephone cord should never be allowed to hang low and come in contact with the storage battery, because the acid will eat into it very rapidly.

Many Listeners in England
Radio set owners in the British Isles now total 1,044,325.



KEEPING A RECORD

"Was Jack heartbroken when you killed him?"
"No. He was perfectly horrid."
"What did he do?"
"When I gave him back the ring he took a little file out of his pocket and made a notch on the inside."
"What was horrid about that?"
"There were five notches in it already."

STRANGE OCCURRENCE



"How did the accident happen?"
"Mistook a puncture-proof tire for a life preserver—and went down."

With Us Tonight

Around the banquet board we sit
Mid oratorical glory.
The man who makes the real hit
Just tells a funny story.

His Method

Customer—How is it that I have not received a bill from you?
Grocer—The fact is, Mr. Beck, that I never ask a gentleman for money.
Customer—Is that so? And what do you do if he doesn't pay?
Grocer—If he does not pay, I conclude he is not a gentleman and then I ask him.—Progressive Grocer.

Some Difference

"Yes, I get \$30 a week," said the saleslady in the millinery establishment.
"How do you manage to command so large a salary?" asked the country school teacher.
"I know hats."
"Dear me! For \$50 a week I have to know everything!"—Louisville Courier-Journal.

The Reckless Age

"I suppose old Jim Tucker is as stingy as ever," remarked the former resident on a flying visit to Dinkysville.
"Gosh, no," exclaimed the native. "Jim's getting to be a regular spendthrift. Why, he even gets his hair cut at the barber shop now!"—American Legion Weekly.

Out of Season

"Our boss discharged three pretty stenographers today."
"Isn't it a strange time of the year to be canning peaches?"

COLD HOT STUFF



Robbie—Gee, that's hot stuff.
Mother—What, Robbie?
Robbie—This ice cream.

Casual Observation

Investigations bring
A state of mind intense—
Yet seldom show a thing
That makes much difference.

All His Own Way

"Do you never resist the controversial attitude toward your speeches?"
"Never," answered Senator Sorghum. "The only man I know of who can go on talking without risk to provoking controversy is a radio announcer."

The Art of Selling

Secretary—Mr. Terry said to tell you he is too busy to talk to you today.
Life Insurance Agent—Tell him he won't have to say a word.

Just an Impression

"Did you get the number of the car that hit you?" asked the traffic cop.
"Look at my back, officer," replied the victim weakly. "I think you'll find the number stamped there."—American Legion Weekly.

Best Sport

Bob—What do you consider the best indoor sport?
Robbette—Holding hands—no matter whether you're playing cards or making love.

Those Hopeful Friends

"My wife's friends all told her I would not make a good husband. But we have been married 20 years now without a cloud on our horizon."
"And what do they say to that?"
"Say it can't last."

Ever Thus!

"How did the collision occur?"
"A fast driver with the right of way and another fast driver who was sure nobody would be using the main thoroughfare."