

# Use Airplane to Seek Old Cities

Professor MacLean of Rochester University Finds Outline of Ancient Irrigation Canal.

## IMPORTANT DISCOVERY MADE

British Pilot Finds Location of Two Lost Cities of Opis and Sitace—May Push Back History Another Age.

New Haven, Conn.—Lost cities of ancient civilizations, buried for thousands of years beneath the shifting sands of Egypt, Mesopotamia and Arabia, will soon be located through the use of airplanes, according to Prof. R. A. MacLean of Rochester university, late staff officer with the British troops in Persia, who discussed this problem before the Archeological Institute of America.

The archeologist, circling about some 2,000 feet in the air, with a clear sweep of vision for 20 miles in all directions, can make out certain continuous lines of depression, indicating ancient irrigation channels, with mounds strewn along these lines indicating buried cities.

Ordinary surveys could never reveal this because of the great distances covered by them. Under the very ground on which countless caravans have passed for more than 5,000 years and where even scientific expeditions may have pitched their camps for the night, lie cities whose contents may push back history another age, whose wealth in gold, silver and precious stones may far surpass anything unearthed even in Egypt.

### May Find Lost Cities.

An important discovery has already been made by a British pilot, involving possibly the definite location of the lost cities of Opis and Sitace—the famous centers of ancient culture and wealth described by Xenophon 2,500 years ago, but never heard of since. The pilot operating last summer in Mesopotamia, noticed while on his numerous air reconnaissances what appeared to be a long natural delimitation covering many miles.

This depression branched off from the Tigris river at Bagdad, ran south a bit, and then curved gradually back to the river, finally running into it at Samarra. Along this depression were many mounds—appearing from above as mere discolorations. Major Beaseley, commanding the air post there, and an enthusiastic archeologist himself, when told of this passed the news on to Professor MacLean, and a series of flights were at once arranged.

On these air surveys, Professor MacLean was astonished to find unmistakable signs of an old channel, which parted from the present Tigris river channel at Samarra and ran a southerly course for a full 100 miles before rejoining the present channel at Bagdad. The importance of this discovery was at once apparent to Professor MacLean, for it was a graphic indication that the ancient Tigris had run through a different channel some fifteen miles south of the present one and that the sites of ancient cities, so carefully marked out by scientists, who based their calculations on the present channel of the Tigris, were actually 15 miles south of where they were supposed to be.

### Ancient Chain of Cities.

In support of his discovery, Professor MacLean points to the many mounds strewn along the line of this old channel, indicating the ancient chain of cities once flourishing on the banks of the Tigris. Some of the most important cities of ancient times, including Opis, Sitace and Esiki, Bagdad, with many still more primitive towns, have thus passed unnoticed while scientists were busy exploring the banks of the present Tigris.

Another surprising discovery was that of the ancient irrigation system, noted in the ancient chronicles, but

never reconstructed. From the air Professor MacLean and Major Beaseley have been able to chart out entire systems of irrigation streams and ditches by simply sketching the lines of depression and discoloration. The results show a very unusual system of irrigation, closely resembling the skeleton of a bony fish, with the main ditch as the spinal column, and the local ditches as ribs and small bones.

## TO RESTORE WAR INSURANCE

Veterans Who Permitted Term Insurance to Lapse Can Easily Get It Reinstated.

Washington.—It will be news to many World War veterans to learn that the United States veterans' bureau has inaugurated a reinstatement campaign for the benefit of those who, either through misunderstanding or inability to meet premium payments, have permitted their term (war time) insurance to lapse.

Director Forbes announces that no matter how long a time has passed since the last premium was paid, an ex-service man may easily renew his term (war time) insurance contract if he is in good health, or if he is disabled, provided the disability from which he is suffering is due to service and is not of a total and permanent nature. Veterans will be particularly interested in learning that they may reinstate \$1,000 or any higher amount, in multiples of \$500, of the amount of insurance they carried while in the service. It will also be of interest to the public to know that over 600,000 of the men who applied for insurance during the war have continued their policies in force and that these ex-service men and women are carrying insurance protection amounting to the enormous sum of over \$3,000,000,000.

The reinstatement requirements have been made most liberal; in fact, if an ex-soldier is in good health it is only necessary for him to furnish medical proof of that fact, and pay

## Man Is Shot in Squabble Over Duck That Cat Stole

San Francisco.—Charles Palmer, after shooting a duck near Belmont, a suburb, was invited into the cabin home of Harry Shaw, a watchman, to get warm. When Palmer started to leave he missed the duck, and in the argument that followed, according to subsequent testimony, he was shot in the face. An undersheriff took them into custody despite their protests that their difference was purely a personal matter, and Palmer pleaded guilty to assault. Shaw insisted on paying Palmer's \$10 fine and they went back to Shaw's cabin, where they found a pile of duck feathers and a guilty-looking cat.

two monthly premiums on the amount of term insurance to be reinstated. Physicians have been appointed in all of the branch offices of the bureau where ex-service men can secure the necessary medical examination without cost. Detailed information may be obtained by writing to the United States Veterans' Bureau, Washington, D. C., but in the interest of accurate identification and promptness, the person writing should be sure to give his full name, rank and organization when in the service and, if possible, his serial number.

## LAUGH IS CAUSE OF MURDER

Boy Boasts of Killing Girl Who Mocked Him When He Missed Good Shot While Hunting Squirrels.

Iron Mountain, Mich.—Charged with killing a twelve-year-old girl who mocked him when he missed a good shot while hunting squirrels, John Shultz, seventeen years old, is under arrest here. The boy was arrested when he boasted of the killing to a boy friend, police declare.

Shultz and twelve-year-old Gusti Jagzte were hunting near their homes when the girl missed a shot at a chipmunk, he told friends. The girl laughed at her companion, and he shot her, causing her death almost instantly, the police charge.

# Ragged Genius Gives Concert

Wizard of Piano Entertains Police Station Inmates With Jazz and Classic Stuff.

## LIFE STORY ONE OF TRAGEDY

Unkempt Prodigy of "Hoboes' College" Retains His Love of Music Through Vicissitudes That Pursue Shambling Life.

Philadelphia.—Music critics have ignored the concert given at the piano of the police station the other evening by Harry Tannehill of Pittsburgh and points West, more recently musical director of the Hoboes' college and pianist extraordinary.

Tannehill, cleverly disguised as a hobo—and one in all reality—gave the police several hours of uninterrupted ragtime and then tore off a lot of classical numbers that left the veriest patrolman feeling like an ambassador. He glided through a little Liszt, gave some Chopin dirges and then threw the whole outfit into raptures with a masterful interpretation of Rachmaninoff.

It was an impromptu affair entirely. The artist arrived at the little bare room opposite the cell tier shortly before seven o'clock, conveyed by Mulholland of the "motorcycles." His escort had lured him from the concrete campus of Hoboes' college. For four hours he played his reper-

toire of melodies, jazz and classic. The station house did its usual nightly business of the district. Drunks were brought in—many of them. Vagrants were lodged. The police surgeon made his round. And all a glance into the music room disclosed to any of them was the sight of a little ragged figure, cap tossed aside, battered shoes, dirty sweater and unforgivable linen, sounding chords in a revery. Two revolver shots sounded, just around the corner. Someone receiving wrong change in a nearby cigar store had said it with gunfire. The music never stopped. It even grew stronger.

### Tells Life Story.

Lieutenant Cocoran finally poked his head into the music room and ordered a halt. Then they got him talking. By now a metamorphosis had taken place. The "bum" had given way to the musician and Tannehill discoursed of music and his eventful past as if he were drinking wine with intimates on a terrace in fair Capri. He was forty-six, he said. Had taken up music at fourteen, studied the piano for eight years, three in the conservatory at Mount Union, O., and then for a time had gone on the concert stage. After that he tried teaching.

"Eight years ago," Tannehill said, "my wife deserted me and she took with her our three-year-old daughter. She may be alive today, she may be dead. I don't know and I haven't been able to find out. My little girl was my world; when she went, ambition followed."

The pianist came to Philadelphia nearly three years ago, but other than a few movie-palace performances he has been without work. He tried carpentry for a while, and other work more arduous, but was not equal to it.

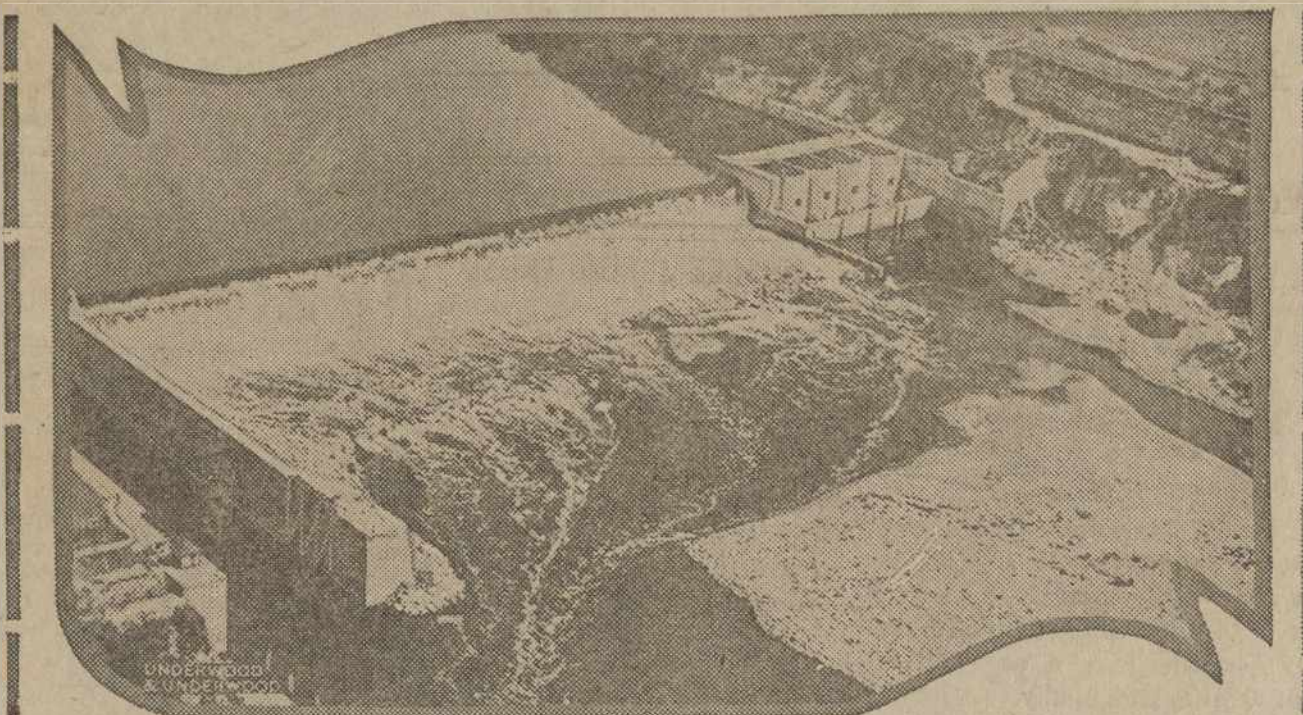
"You know the rules of the Hoboes' college, don't you?" asked the bluff Mulholland of his protegee. "If you get work, you're automatically expelled. You'll have to leave the institution."

A "Curtain Call." "I don't care," answered the maestro. "Give me a few decent looking togs and several good meals in succession and I'll defy any of them to tell the bum from the musician. Just once more, before I die, I'd like to get loose in the vicinity of a grand piano."

A taste for music, like the love of a horse or a dog, is a saving grace; the last characteristic to go in the drop to degeneration; the first thing to build upon in the climb to rehabilitation. The police made up a purse for their visitor and asked him to play one more before he left.

"I'll give you a little 'William Tell,'" he announced. And under the manipulation of the nimble fingers of a master, the old piano awoke to a life it had never known. The master arose and bowed. Then, slowly, he passed out of the room.

## Power Rights From This Dam Asked by Ford



An exclusive photograph, taken from an airplane, of the Mississippi river high dam between St. Paul and Minneapolis, for which Henry Ford has applied to the federal power commission for power rights. The Detroit motor car maker, if granted permission to harness this water power, has announced he will build a ten-million-dollar automobile, tractor and farm implement plant on the banks of the river. Also he will open a barge line to run down the Mississippi, carrying freight to St. Louis, Memphis and New Orleans. On the return trips the barges would carry coal from Kentucky and southern Illinois fields.

# Science Finds Use for Waste

Discover Way to Make Alcohol and Good Quality of Animal Food From Sawdust.

## COAL DUST MADE INTO BRICKS

Experts Save Smelting Industry by Finding Way to Eliminate Bulk of Poisonous Dust From Flue Gases.

Do you know of anything that is being wasted that these scientists might try their hands on?

Washington, D. C.—Savants have shown that if the atmosphere were not impregnated with dust there would be no cloud effects, no radiant sunsets, no soft afterglow of harmonious colorings which lend a halo to the quiet of evening. Also, there could be no condensation of moisture as in rain, mist or fog without nuclei such as dust particles.

That is one of the stories of the usefulness of dust, but government scientists and others are more interested just now in determining what can be done with dusts of specific kinds that have long constituted big items of waste in various industries.

Perhaps the most interesting development of the experimental work that has been going on is in connection with the problem of what to do with sawdust. Ever since the first saw bit its way through a piece of timber the enormous waste in sawdust has been a matter to worry over. In time it was found that this debris could be made commercially valuable as the basis of various manufactures. Oxalic acid is produced on a large scale from sawdust, and sawdust is also used in the carbonating stage of the process for the manufacture of soda ash.

### Alcohol From Sawdust.

But now it has been discovered that sawdust can be converted into a food and by carrying the process a step further alcohol may be produced. The sawdust food is one for beast and not for man, but nevertheless it is useful and may become a factor in farm economics. Sawdust alcohol will not be used for beverage purposes, but there is a great need for a new motor fuel to take the place of gasoline or to supplement the supply of that article which is not keeping pace with the demand, and alcohol seems to hold out the greatest possibilities in that direction.

White pine sawdust is used in this process. It is treated with dilute sulphuric acid and cooked under pressure with steam. This brings about a chemical change in which the sawdust is partially converted into glucose, a simple sugar which is both digestible and of food value. There is from 14 to 18 per cent of glucose in this mixture, which is then neutralized with lime, the sugar dissolved and the solution filtered off and boiled down under reduced pressure until it is of the consistency of molasses. This molasses is then mixed with the partially dried sawdust residue and the result is a product closely resembling bran.

### Farmer Had Right Idea.

Thus it would appear that the tight-fisted farmer who tried feeding his mules excelsior and sawdust as substitutes for grass and bran mash had the right idea. His trouble was that he did not prepare the stuff properly. In producing alcohol from the bran mixture the essential step is to let the sugar in it ferment. It is estimated that three to four hundred million gallons of alcohol could in this way be derived from sawdust, shavings and bits of lumber that are wasted each year in the mills of the country.

fume or very fine dust. This fume or dust settles over the farms for great distances surrounding the smelters and causes great injury to all kinds of vegetation, with the result that the smelting companies were being mulcted for heavy damages constantly, and there was a prospect that they might be required to shut down their plants.

Experts were called in and eventually a way was found to eliminate the bulk of the poisonous dust from the flue gases. The white arsenic thus collected aggregates thousands of tons annually and it is devoted to many useful purposes. It is converted into pigments, compounds of value in medicine and in the dye industry, and into insecticides for spraying orchards, vineyards and gardens.

### Careful With Gold Dust.

There is one kind of dust that everybody has always been more than anxious to utilize and that is gold dust. If any of that goes to waste it is because it cannot be avoided. In all the varied mining processes and wherever gold is handled in the mints or in the arts every precaution is taken to conserve every particle of the precious metal. In fact, dust is gathered and saved that is so fine that it is little more than "color."

In placer mining all the gold is "dust," but it occurs in scales, grains or nuggets, and all the particles are smooth and rounded, thus differing from vein gold which is sharp and angular. The nuggets have varied in size from small grains to one found in Australia that weighed 2,520 ounces and was worth about \$42,000. Appropriately enough this nugget was christened "Welcome Stranger." The largest nugget found in California weighed 280 ounces. Russia has produced one of 99 ounces and the Klondike one of 85 ounces. By far the greatest proportion of the gold recovered, however, is in medium and fine dust.

Where gold is handled in large quantities all sweepings and all dust collected by vacuum cleaners is saved, for it contains minute particles of gold that in the aggregate and in the long run amount to large sums. Even the clothes worn by those who handle the gold are "mined" at stated intervals.

### Polly Cries "Fire," Saves Home.

Philadelphia.—A pet parrot saved a three-story apartment house here from destruction by fire.

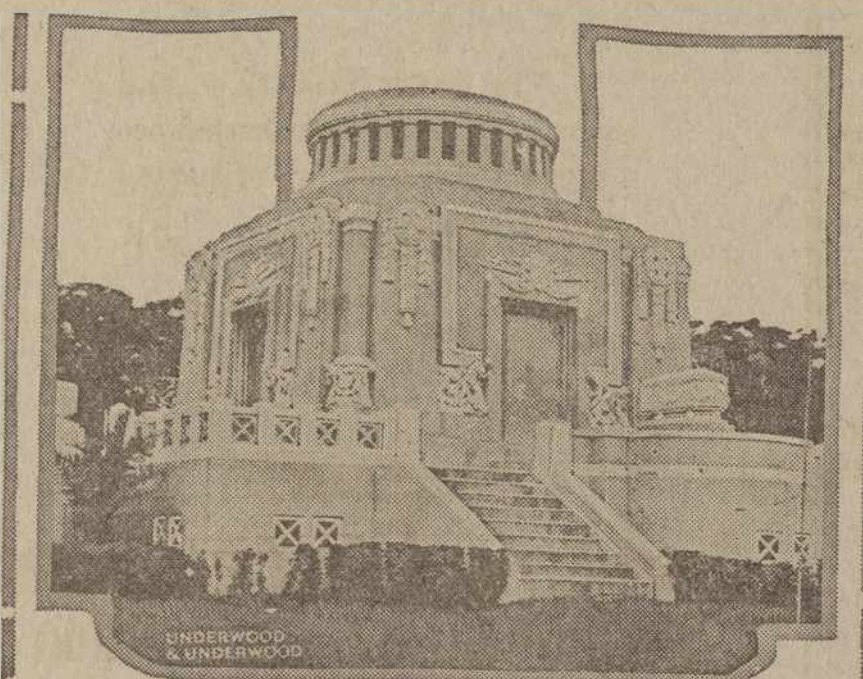
C. J. Doyle, who has an apartment on the top floor, had retired, but in a few moments he was awakened by the shrill screams of his parrot, which he kept in the kitchen.

## Lady Northcliffe May Wed Again



The Viscountess Northcliffe, it is rumored, may wed Sir Robert Hudson, chief agent of the Liberal party. Sir Robert Hudson is a widower, fifty-eight, and has a daughter. He is chairman of the joint finance committee of the British Red Cross and was knighted for his service during the war. He was a close friend of Lord Northcliffe, and it is reported that it was the latter's wish that his widow should become Sir Robert's wife. Portraits of them are shown here.

## Soldiers' Memorial at Manila



This beautiful monument has just been finished and unveiled as a memorial to the veterans of the revolution against Spain which was going on during the Spanish-American war and which the Americans aided. It is situated on the outskirts of Manila, and is regarded as one of the most artistic soldiers' memorials ever erected.