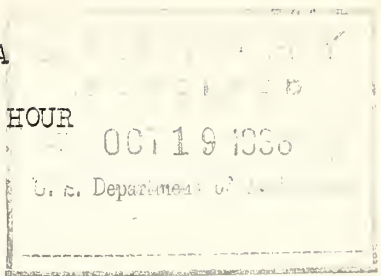


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THE
UNIVERSITY OF NEVADA
LAND-GRANT COLLEGE RADIO HOUR
...oOo...



Presented by
STUDENTS, ALUMNI, and FACULTY
of the
UNIVERSITY OF NEVADA
for
THE ASSOCIATION OF LAND-GRANT COLLEGES AND UNIVERSITIES
with the cooperation of
THE UNITED STATES DEPARTMENT OF AGRICULTURE
and
THE NATIONAL BROADCASTING COMPANY
over the
NBC NATIONAL BLUE NETWORK
...oOo...

Reno, Nevada
JULY 20, 1938
8:30 a.m. PST

CHICAGO

ANNOUNCER:

The National Farm and Home Hour!

HOMESTEADERS' ORCHESTRA:

National Farm and Home Hour Theme Air.

ANNOUNCER:

Today we are the guests of the University of Nevada as a group of its students, alumni, and faculty on the campus in Reno portray for us the service of that land-grant college to the people of its state.

But first the Homesteaders's orchestra, here in Chicago is heard in Meinrath's stirring "Patriots and Pioncers", portraying the spirit of the pioneer West of which Nevada is a part.

HOMSTEADERS' ORCHESTRA:

"Patriots and Pioncers" by Meinrath.

ANNOUNCER:

Now we take you to Reno and the campus of the University of Nevada.

RENO

TRUMPET QUARTET:

Fanfare from Rubank Fanfare collection.

ANNOUNCER:

Here we are on the campus of the University of Nevada. The sun is filtering through the elms on to the green lawns and bright flowers, the colonial buildings, the campus lake, and the mountain stream which mark this oasis in the desert. High above us looms the snow-capped peak of Mount Rose, queen of the Sierra Nevada range in the vicinity of Lake Tahoe. Off to the south lie the fertile Truckee meadows, green with trees and farm crops. And here in the Education Building are gathered a group of students, alumni, and faculty of the university to tell you of its contribution to Nevada.

Every land-grant college reflects the nature of its own state. In the absence of President Walter E. Clark, Silas E. Ross, chairman of Nevada's board of regents, a Nevada graduate, and formerly one of its faculty, now tells us a few of the things which distinguish Nevada and her university from other states and their land-grant colleges. Mr. Ross.

ROSS:

Welcome to Nevada and her state university! Sixth largest of all the states, Nevada is an empire in itself. Within its borders could be tucked New England and most of England in addition.

Shut off from the heavy storms by the mountains on the west and its elevation of one thousand to thirteen thousand feet, Nevada is a semi-arid country. On the average, less than nine inches of moisture in rain and snow fall each year.

(over)

Fewer than ten days on the average are sunless during the entire year.

In the hundreds of miles from its southern to its northern border, Nevada's climate ranges from the semitropical in the vicinity of Boulder Dam to the bracing temperatures of its northern counties.

Since it is part of the great basin, waters from most of Nevada's streams never reach the sea, but empty into mountain lakes, some of them among the largest in the country, or are absorbed by the earth.

As the water runs off from the mountain snows into the streams, it is diverted to the fertile valley lands to provide bountiful crops. Forage which grows on the mountain sides furnishes feed for cattle, sheep, and horses. And great quantities of precious ores are found in Nevada's highly mineralized mountains.

Yet in Nevada live but one hundred thousand persons, fewer than one for each square mile and the smallest population of any of America's states.

Since the early western gold rush, these few people have built up a civilization of a high type, based upon agriculture, mining, and transportation.

Nevada's per capita wealth is the highest in the nation. Her common schools have been rated among the two or three best of any state. Nevada's citizens own more automobiles per capita than the residents of any other commonwealth. Her highways are the delight of the motorist. Magazine and newspaper circulation is among the greatest per person in the country. With three other states, Nevada leads the nation in the percentage of her families having radio sets. She has none of the so-called "nuisance taxes" -- income, inheritance or sales levies.

And Nevada, more than any other state, reflects the individualism of the pioneers.

Under these conditions, Nevada's citizens have built a university which reflects their faith in learning and culture, and which is truly a part of the state. One of every ninety-three of Nevada's residents is a student at the University of Nevada, a student-to-population ratio equalled in no other state university.

ANNOUNCER:

We agree with you, Mr. Ross. This is a splendid record. The majesty of Nevada's scenery is reflected in "Nevada, My Nevada", University of Nevada hymn, by Charles Haseman, sung by a chorus of students, alumni, and faculty assembled especially for this occasion.

MIXED CHORUS:

"Nevada, My Nevada", by mixed chorus with piano accompaniment.

ANNOUNCER:

"Nevada, My Nevada" sung by a mixed chorus set the stage for the episodes from the history of the state and its university.

NARRATOR (Goldwater)

The story of the origin and development of the University of Nevada is the saga of a pioneer people determined that their sons and daughters shall have an education equal to the best that the nation affords. From the beginning, these

efforts have centered around the concept that Nevada's sole institution of higher learning should be a land-grant college. Even the first settlers in the state, as they laid the foundation for its great industries, paved the way for the University of Nevada as it is today.

It is the middle 1850's, and the twilight of a summer evening is settling over the fertile valleys in the eastern foothills of the Sierra Nevada mountains.

ORGAN:

"Wait for the Wagon". Fade in - up and fade into wagon sound.

SOUND:

Creaking of wagon wheels and tired plump of horses hooves on the ground.

JOHN: (Beatty)

Git up there, Daisy; git along, Prince.

SOUND:

Clucking to team and slapping of reins on horses' backs.

SARAH: (Addenbrooke)

I guess they're tired, too, John, just like us. Seems to me like we'll never get to Californy.

JOHN: (Beatty)

Oh, taint long now, Maw. Californy's jest over them blue mountains with snow on 'em way off there, I surmise. We ought to be there in 'bout a week if the critters and the wagons hold up goin' over them there peaks.

SOUND:

Rattling of wagon boards and creaking of wheels and harness.

SARAH: (Addenbrooke)

Well, its about time. Why, its - let's see - purty nigh four months since we left Missouri. Why don't we settle here, Paw; this looks like good farmin' country?

JOHN: (Beatty)

No, Sary, we're going to Californy and take us up some rich land. Them mines is turnin' out gold and folks will want the stuff we raise. Git up there, Daisy; git along, Prince.

SOUND:

Sounds of heavy wagon moving along rough road.

JOHN: (Beatty)

Hear them folks back in Jim's wagon; they sure can sing that Californy song; let's breathe a spell till they ketch up.

MIXED CHORUS:

"Oh, Susannah" (one verse) with guitar accompaniment. Starting as in distance, grows louder as wagon comes up to John and Sarah, and ends in volume.

JOHN: (Beatty)
Sounds awful purty, but we got to git on if we're going to find a place to camp.

SOUND:
Clucks to horses.

JOHN: (Beatty)
Git up there Daisy; git along, Prince.

SOUND:
Sound of heavy wagon starting and creaking along.

JOHN: (Beatty)
There's a likely lookin spot to camp, Sary. See them cottonwoods along the river and that meadow. Why, looks like somebody's there already.

SOUND:
Creaking of wagon, finally ceasing as it comes to a stop.

SOUND OUT

JOHN: (Beatty)
Howdy, Stranger!

MINER: (Lough)
Hi, Pardner!

JOHN: (Beatty)
Plenty of feed here for a hundred wagons and stock tonight?

MINER: (Lough)
Plenty. We got only a couple of Jackasses.

JOHN: (Beatty)
Jackasses! Why you must be a miner. We aint in Californy yet, are we?

MINER: (Lough)
Not yet, you aint; yo're in Nevada. The Washoe country. Thar's gold and silver in this country. The colors is peterin out in the California creeks and the miners is all comin' this a way.

JOHN: (Beatty)
Minin'? here? Then you'll need hay and grain for your burros and hosses and vittles for yourselves.

MINER: (Lough)
Yes, sir. This's the coming country. Thar's gold and silver here. There's going to be mines and mills, and lots of folks, and cities. There'll be railroads, and farming, and, maybe even a state.

JOHN: (Beatty)
Git down, Sarah; we're going to settle here. See the grass on them hills! There's feed for cows and sheep in the summer, and we'll keep em on hay in the

winter. See that sagebrush higher'n my head! We'll clear that off, put water from the river on that land, and it'll grow big crops.

ORGAN:

"Clemintine" -- to furnish atmosphere. Low to loud to low; then barely perceptible in background as narrator continues.

NARRATOR: (Goldwater)

So, as the mining claims along the California streams were taken up and the ever-widening circle of prospectors reached the Washoe country of western Nevada, at that time a part of the Utah territory, mining camps sprang up, and with them came the need for the produce of the farm. Thus Nevada's two greatest industries were born. Ever since they have thrived and today are the backbone of the state's economy.

ORGAN:

"Clementine".-- Up and out.

NARRATOR: (Goldwater)

And in the University of Nevada, with its courses in engineering and agriculture, these industries are reflected today. From it young men and women go back to the state to build stronger and stronger its mining and ranching.

And when, in 1863, the first constitutional convention settled down to outlining the basic law of the state to be, with Mark Twain on its newspaper reporter's bench, one of its articles provided for a state university or agricultural college, with a mining department. Although the people of the territory rejected that constitution, they believed in a state university and made provision for it in the document of 1864 which made Nevada a state. So, today, Nevada's university may be said to celebrate the diamond jubilee of its founding.

But not all of the delegates of the Nevada Constitution Convention believed in the venture into higher education.

ORGAN:

"Pomp and Circumstance" - Elgar. Fade in - up and out.

SOUND:

"Murmur of men's voices as delegates come into room and find seats. (Continues as follows).

VOICE: (Hicks)

Sit down here by me, George.

VOICE: (Deming)

I don't care what you say, I'm opposed to it.

VOICE: (Doyle)

Well, I'm certain the people favor one.

VOICE: (Beatty)

What are you two arguing about, anyhow?

CHAIRMAN: (Lough)
Gentlemen! Gentlemen!

SOUND:
Rapping of gavel. Voices die down, and quiet ensues.

CHAIRMAN: (Lough)
This body will come to order. We will take up the proposal to provide in the Constitution of Nevada for the establishment of a state university.

VOICE: (Deming)
Mr. Chairman and Fellow Delegates! I believe as strongly as any of you in public education, but I confess I have no faith in a true university in this new state. Our resources are too limited, our population too meager. It is too easy to reach other regions, where grass grows, to be trodden under the feet of the pupils, and where trees wave over their heads. Let us establish a mining academy to provide educated young men for the operation of our mines and mills, and set up a system of common schools, but let us not venture into higher education.

VOICES:
Ad lib. "No", "No", "That's wrong". etc., in confused babel of extemporaneous outbursts.

VOICE: (Hicks)
Sit down! You're out of order!

VOICE: (Doyle)
You're wrong. Who said we don't want a university?

VOICE: (Beatty)
He's right. A college would cost too much.

VOICE: (Doyle)
Mr. Chairman, Mr. Chairman! Let us by all means provide for an adequate system of common schools, for they are the basis of all formal education. Let us also set up in this great mining country one of the best of mining schools, but let us make it part of a state university in keeping with the culture of our people, that it may discover and cherish the truth and make it available to our sons and daughters and to all our people.

VOICE: (Lough)
Today we are laying the foundations for what we expect to be a great commonwealth; let us make provision for the education of our children which will compare favorably with the best publicly supported universities in the nation.

VOICES:
Ad lib. "That's right." Yes." "That't it." etc., in confused babel. (Continues as follows.)

VOICE: (Hicks)
I'm in favor of that. How about you?

VOICE: (Deming)
How can you have a college without.....

VOICE: (Beatty)
My district will vote against this.

VOICE: (Doyle)
We want a college for Nevada.

VOICE: (Hicks)
While undoubtedly our new state university will have a humble start, provision should be made in the constitution for instruction of those subjects which will best serve our young people and our state. Agriculture, to furnish intelligent solution of our problems in livestock raising and the growing of crops, and engineering, especially as it relates to mining, to furnish young people to develop the natural resources of the state.

VOICE: (Doyle)
Mr. Chairman. The gentleman is right. Our university must be a land-grant college, founded on the congressional act of 1862 and taking advantage of the land grants made to this state for just such a purpose.

VOICE: (Beatty)
Fellow Delegates! Nevada's state university should be open to all, poor and rich alike.

VOICE: (Deming)
Mr. Chairman. I disagree. Let us allow those who want the new fangled higher grades of learning pay for such institutions themselves.

VOICE: (Hicks)
Gentlemen, we must remember that as delegates here, we are but the servants of the people. They have rejected the first constitution we proposed. Let us give them no grounds for refusing this one. If I read their wishes aright, they demand a state university open to all who can profit from it.

VOICES:
Ad lib. Subdued voices as follows.

VOICE: (Doyle)
You're right! Education for all!

VOICE: (Lough)
Yes, Yes. Education for all!

VOICE: (Deming)
Wait a minute! Don't rush this thing.

VOICE: (Beatty)
Education must be free!

ORGAN:
"Sigurd Josalfar" (last movement) - Fade in -- up -- fade to background.

NARRATOR: (Goldwater)
Thus the University of Nevada was made a part of the basic law of the commonwealth, a better provision for higher education in the pioneer mining and agri-

cultural community than had been made at that time in the constitution of any other state but one. And, by the signature of President Abraham Lincoln, as he approved the constitution of the new state of Nevada, the University of Nevada also came into being. But ten years elapses before the struggling new state could begin to turn into reality its ideals of higher education.

ORGAN:

"Sigurd Josalfar" (last movement). Up and out.

NARRATOR: (Goldwater)

Then, in Elko, in a little populated portion of the state, the University of Nevada in 1874 first opened its doors. Though little more than preparatory school, it was a beginning, and with its establishment Nevada put to its intended use the income from the federal land-grant. But students were few and graduates were fewer. So, in 1885, the legislature determined to reestablish the institution on a collegiate level in Reno in the western part of the state where lived the bulk of the population.

In September 1887, in the newly completed first building on a hill overlooking the Truckee Meadows, the University of Nevada was reborn, as with impressive ceremonies, it opened for the fall session.

ORGAN:

"Gaudemus Igatur". Fade in -- up and out.

SOUND:

Ad lib. Buzz of subdued voices waiting for opening of exercises. (Continues as follows).

GIRL NO. 1: (Bibb)

Isn't this exciting?

GIRL NO. 2: (Morris)

Just think; it's almost a new university and we're to be the very first students.

GIRL NO. 1: (Bibb)

What are you going to study?

MAN NO. 1: (Beatty)

I'm going to learn how to run a ranch.

GIRL NO. 2: (Morris)

There's the new president. Just look at that beard!

SOUND:

Buzzing of conversation, which fades.

VOICE: (Lough)

Governor Stevenson, chairman of the board of regents, will introduce the president and welcome him to his new responsibility.

GOVERNOR: (Hicks)

Students, faculty, and friends of the State University of Nevada. This is

an auspicious occasion. Today our state university again opens its doors to the young people of Nevada; this time in a new location, in new quarters in this magnificent structure, and with a new course of study founded on true collegiate standards. In fact our university is being reborn today. To its leadership I welcome a man of proven ability in education, LeRoy D. Brown, former commissioner of education for the State of Ohio.

SOUND:

Ad lib..... applause, etc.

PRESIDENT: (Doyle)

Thank you. Thank you.

It touches me deeply to be welcomed so enthusiastically to my new duties in this youthful state of Nevada.

This is not only the University of Nevada, it is also a land-grant college, and is made possible, in addition to the funds provided by the state, through the income from the sale of the lands granted Nevada by the federal government. It is fitting, therefore, that this fine new structure in which we begin our work should be named for Justin S. Morrill, the father of the land-grant college system, and author of that act. For, in a way, Senator Morrill is also the father of Nevada's university.

A state university and a land-grant college in one! What a happy combination. From it, the University of Nevada is destined to grow through the years in number of students, in strength of its faculty, and in its service to the state.

SOUND:

Ad lib. Applause, gradually fading away, then pause.

VOICE: (Bibb)

The new president's a fine man.

VOICE: (Beatty)

Nevada is a pretty small state, but we're going to have a real university.

VOICE: (Bibb)

That's right..... a real university.

SOUND:

Conversation (ad lib) as audience breaks up and departs, finally fading away.

ORGAN:

"Gaudemus Igatur". Up and fade to background.

NARRATOR: (Goldwater)

And President Brown was right.

The University of Nevada now has grown to the stature of manhood. Its fifty students have become twelve hundred; its faculty has multiplied from the original three professors to an instructional, research, and extension staff of well over a

hundred; its buildings, from the original Morrill Hall standing on the barren hill to more than a score of structures in nearly a hundred acres of greensward.

ORGAN:

"Gaudemus Igatur". Up and out.

NARRATOR: (Goldwater)

But most of all has the University grown in service to the state. From its halls thousands of young people have gone forth to become leaders in Nevada's professions, industries, business, and in its cultural and social life. Through its experimental work and its extension education, it has taken the developments of the applied arts and the sciences to all the commonwealth's people.

And, through all the years, from the Morrill Hall tower has sounded out the campus bell as it has called the students to their classes, tolled the knell of its faculty and distinguished sons and daughters, and summoned Nevadans to loyal service to their alma mater.

SOUND:

Ringing of Morrill Hall bell (picked up by microphone in belfry) gradually fading.

NARRATOR: (Goldwater)

So today, as for a half century, the Morrill Hall bell rings forth the service of the University to the people of Nevada.

ORGAN:

"Russian National Anthem". Fades into volume and out.

ANNOUNCER:

On this University of Nevada Land-Grant College program the great and colorful range of Nevada must be included.

Less than one percent of Nevada's land is cultivated. The rest of its seventy million acres constitute one vast livestock range -- and on it has grown up the romantic life of the cowboy and herder. A male quartet from the chorus and William Bussey, a Nevada student with his guitar exemplify this spirit in "Git Along, Little Dogies" as it is sung around the campfire on the Nevada range.

MALE QUARTET:

"Git Along, Little Dogies" with guitar accompaniment.

ANNOUNCER:

Very interesting! I can see you are welcome guests around any campfire with your songs and banjo.

In their service to the people of the state, the college of agriculture, the agricultural experiment station, and the agricultural extension service has ranked high in accomplishment, as they have trained young men for farming and ranching, uncovered the secrets of science applied to agriculture, and brought to the rural people current scientific and economic information. Although few in number, these men and women have made contributions which have extended far beyond the borders of their own state....

ORGAN:

"Beside the Waters of the Truckee"

FIRST VOICE: (Goldwater)

Water from the melting snows on the mountain tops is Nevada's agricultural life blood. As it runs off through the rivers and streams, it is picked up and applied to the cultivated lands in the valleys, which blossom as the rose. But how much snow is there? How much water will result? How much land should be ploughed and can be irrigated? Each spring anxious farmers and ranchers not only in Nevada, but in all the irrigated West, ask these questions. The answer means prosperity or failure. For many years the farmers guessed as best they could. The result was sometimes tragedy.

SECOND VOICE: (Doyle)

Then, three decades ago, Nevada's professor of Latin, an enthusiastic mountaineer, began to consider this problem in his concern for the welfare of all humanity. Could not the snow be measured? Could not the runoff be forecast? Could not farming operations be planned in accord with the water available? He decided they could, and, with the help of the University of Nevada Agricultural Experiment Station, he evolved the Church method of snow surveying, which is used throughout the world today where water from snow is important in agriculture and industry, and has brought him world renown as president of the International Commission of Snow. In Nevada, each spring, the farmers thank him for giving them a more secure and a happier life.

ORGAN:

"Beside the Waters of the Truckee".

FIRST VOICE: (Goldwater)

On the Newlands project in western Nevada, the first federal irrigation project, conditions are ideal for the raising of turkeys. The dry climate with cool nights, accompanied by sound cultural practices, produces a bird to grace the best holiday tables in the land. But, a few years ago, the farmers had limited market outlets and were about to give up turkey culture in favor of some other crop.

SECOND VOICE: (Doyle)

However, the University of Nevada Agricultural Extension agent there, believed that if the people of the West learned of the high quality of Nevada turkeys, ready sales every where would result. So he persuaded the turkey growers to form a cooperative marketing association and to put the birds out under a brand name on the select markets in San Francisco and Los Angeles. At the same time, he told them they must grade the birds and describe the grades adequately so that every purchaser knew just what he was getting. It was the first real turkey grading in the United States. The first year's production was snapped up eagerly and it was not long until Nevada's "Diamond 'N'" birds easily topped the entire nation in price. And out of it came the nucleus of the great Northwestern Turkey Growers' Association, non-profit cooperative marketing group with ten thousand members in the Pacific West. The extension agent became one of the world's turkey production authorities, whose books are used in the leading colleges of agriculture everywhere.

ORGAN:

"Beside the Waters of the Truckee".

FIRST VOICE: (Goldwater)

When graduates began to go from the Nevada College of agriculture back to the rural areas, practically no scientifically trained farmers and ranchers existed in the state. Nearly all the men who ranged cattle and sheep or raised the various field crops had learned the job as a father hands down practices to his son. Many of these methods of experience were sound, but others conflicted with the basic principles of science.

SECOND VOICE: (Doyle)

Year by year the college of agriculture sent its technically trained alumni back to rural Nevada to take positions of leadership on the farms and ranches, in the farm organizations, in the marketing of agricultural products, in the agricultural extension service, in the governmental agencies, and in the social organizations of rural life, until today every agricultural community in the state has at least one University of Nevada graduate in agriculture who is a leader in better farming.

ORGAN:

"Beside the Waters of the Truckee".

FIRST VOICE: (Goldwater)

But the University of Nevada some years ago realized that men and women, as well as animal and plant products, are the harvest of farming. And the physical characteristics of adults are formed when they are boys and girls. A survey of the state by the extension service in 1922 revealed that a considerable proportion of Nevada's rural youngsters were in a state of decided malnutrition. Many were below average weight and height for their ages. Others showed poor bone development, flabby muscles, and poor posture.

SECOND VOICE: (Doyle)

Then the University of Nevada Agricultural Extension Service decided to see if it could not remedy the situation. By most persons it was told the task was too great. Nevertheless, the distressing condition was brought to the attention of the public, stimulus toward better health was introduced into the rural schools, and a fifteen year program of education was launched. A year ago that program was concluded, with the health of Nevada's rural youngsters far better than normal, with the people of the state health conscious, with a method of measurement of positive health developed, and with other agencies now carrying on the work begun by the extension service.

ORGAN:

"Beside the Waters of the Truckee".

FIRST VOICE: (Goldwater)

A few years ago a savage malady of cattle called red water disease swept the herds of Nevada. Stockmen throughout the state were helpless to combat its ravages, which resulted in a high percentage of death loss and left range and ranch strewn with the carcasses of its victims. In desperation, the cattlemen appealed to the University of Nevada for help but expected little.

SECOND VOICE: (Doyle)

Nevertheless two doctors in the department of veterinary science went to work on the problem. After years of research, they discovered the organism which caused the disease. That, however, was only the first step. Then they developed a serum which reduced to ten percent former death losses of almost one hundred per-

cent. But the final triumph came with the evolution of a vaccine which prevents the disease in animals for a period of several months. Red water disease largely disappeared from the herds of Nevada cattlemen. The word spread to other states, and the malady was conquered there. Today red water disease, thanks to the efforts of two University of Nevada scientists, is fully under control, not only in the United States, but wherever cattle are raised.

ORGAN:

"Beside the Waters of the Truckee".

ANNOUNCER:

One of the favorite songs of University of Nevada students as they gather under the campus elms and around the campus fireplaces is "Fidelity", with words by Mabel Connor, and the music by Adrian Aitkin, arranged by Mrs. W. E. Clark.

MIXED CHORUS:

"Fidelity" by mixed chorus, with piano accompaniment.

ANNOUNCER:

After a pause for station identification, this University of Nevada Land-Grant College program will continue from the campus in Reno.

SOUND:

Chimes.

STATION IDENTIFICATION:

ANNOUNCER:

Back again on the campus of the University of Nevada and the second part of this land-grant university program telling of the service of Nevada's only institution of higher learning to the people of its state.

Popular on the Comstock Lode, when that greatest of all silver mining camps was pouring out nearly eight hundred millions of dollars in precious ores, was group singing by the lusty miners. Among their favorites was "Washoe", the names of whose author and composer are long lost but which is still widely sung in the state. It is produced today by a male chorus of University of Nevada students, faculty, and alumni assembled for this occasion.

MALE CHORUS:

"Washoe", with piano accompaniment.

PIERCE:

In the seventy-five years of its existence, Nevada's highly mineralized mountains have produced one billion six hundred million dollars in newly-mined wealth. Much of this has been in silver, giving Nevada its name of the Silver State. And mining has always been one of the state's primary industries.

But Acting Director Jay A. Carpenter of the famed Mackay School of Mines will tell you more of this great industry and its relation to the University of Nevada. As a matter of fact, Professor Carpenter, you look mighty like a prospector yourself in those boots, that khaki shirt, and with that alkali dust on you. Did you get into costume for this broadcast?

CARPENTER:

Well, hardly. I've just come from prospecting in eastern Nevada.

PIERCE:

Prospecting? Well, I can see that the Nevada mining "profs" take their jobs practically. And I suppose these two fellows with a month's growth of beard are faculty members of the Mackay school, too.

CARPENTER:

Oh, no; they're students. We're all studying mining right out in the field, as members of the S. Frank Hunt Foundation summer prospecting crew which is an important part of training for the mining at the University of Nevada. Through the generosity of S. Frank Hunt, discoverer of the great Mountain City copper mine, this training is endowed and furnished with full equipment. He has given the Mackay School ten percent of his great fortune, returning to the state part of what he has taken from its mineral deposits.

PIERCE:

Well, isn't that remarkable! I hope you've discovered some likely diggings, Professor Carpenter. A good gold, silver, or copper mine would come in pretty handy about now, wouldn't it.

CARPENTER:

Well, you see the purpose of the trip is primarily to study geology, not to discover, but we're hoping that we'll make a rich find for the University of Nevada some day.

PIERCE:

If I get a burro, a pick and shovel, and a frying pan, could I find a mine?

CARPENTER:

You might! But the chances are against it. And that doesn't mean you need a carload of fancy instruments either. There is a good deal these days about the discovery of mineral deposits through scientific instruments. But as far as Nevada is concerned, and it is the most highly mineralized section in the nation, the strikes are made not by "gadgets" but by men who understand the principles of geology and mining. And that's what we give our students at Nevada.

PIERCE:

Well, I guess I'll skip the prospecting trip, then, for this time. But isn't the Mackay School of Mines named for the great John Mackay the Comstock "Big Four" of Mackay, Flood, Fair and O'Brien?

CARPENTER:

Yes, it is. His widow, Louise Hungerford Mackay and their son, Clarence Mackay of the Postal Telegraph have endowed the school of mines and given to the university in his memory more than a million and a half dollars in endowment, buildings, and grounds. The famous statue of John Mackay which stands in front of the mining building on the campus is their gift. It is one of the finest works of Gutzon Borglum, the noted sculptor of the Black Hills and Stone Mountain monuments. Not only the school of mines, but all phases of university life have been strengthened through the Mackay benefactions.

PIERCE:

I've heard a great deal in other states about the Mackay School of Mines, Professor Carpenter. I guess you must have graduates scattered all over the world.

CARPENTER:

Yes we do. There are few important mining districts in the world, so far as we know, which do not have working in them at least one of the Mackay school's men. Our alumni mailing list looks like the index to an atlas. Mine operators from all over the globe call for our graduates. Many of our students, too, come from abroad. This rough looking fellow here, believe it or not, is a South American. He's Evelio Hernandez and he hails from Columbia.

PIERCE:

Is he a good student? Does he "know his rocks"?

CARPENTER:

Why don't you try him out?

PIERCE:

All right, young man. First, let's see what you know about your school. How many students do you have?

HERNANDEZ:

Let me see. There were about one hundred and ten last year, which is the greatest enrollment the mining school has ever had. It's getting better all the time.

PIERCE:

That's a loyal lad, but remember time on this network is valuable, and just forget the advertising. Isn't there a lot of interesting equipment in that mine building?

HERNANDEZ:

There is! Come on over and see it.

PIERCE:

I will, but it would be pretty hard to take the audience over there right now, so suppose you tell us about it.

HERNANDEZ:

Okay! Of course there are the regular classrooms and laboratories, but it's our special equipment of which we are most proud. In the basement is an underground mine and close by the Comstock mine in which we study the timbering and construction of stopes, shafts, and drifts. All the types of mills used in reducing ores are available, too, and we learn how to run them. Then, of course, there are the furnaces for assaying and smelting the ore.

PIERCE:

That's very practical, isn't it? But, don't you have anything that a radio announcer could understand?

HERNANDEZ:

Well, I'll try you on this!

PIERCE:
All right.

HERNANDEZ:
Did you ever go through an earthquake?

PIERCE:
I guess everyone in the West has at some time or other. You aren't going to produce an earthquake for me are you?

HERNANDEZ:
Well, we have a seismograph over there. It's an earthquake recorder, you know. You ought to see the needle wiggle when a shock is coming in. We use it in studying the earth's crust, and it is one of the few in American mining schools. Quivers from all over the world are received on it. Even from my own country.

PIERCE:
Quivers eh? Well, you passed that examination in good shape, Evilio Hernandez. Now let's see what your pardner knows.

CARPENTER:
Sam Wilson, Mr. Pierce. He lives here in Reno and his father is professor of animal husbandry at the university.

WILSON:
Glad to meet you Mr. Pierce.

PIERCE:
Thank you Sam! Deserting agriculture for mining, eh? Well, so long as you stay in the land-grant college field you're all right. What else in the Mackay school building should I see?

WILSON:
Well, the Mackay Museum is the best collection of minerals and ores in the West, but you'd never know it if I didn't tell you.

PIERCE:
Oh, I'd know gold if I saw it.

WILSON:
What about this specimen I brought over from the museum?

PIERCE:
Oh, you can't fool me, Sam; that's just a gray rock. Had lots of quartz in it.

WILSON:
If you had a truckload of that, you wouldn't have to be a radio announcer. That's 40 percent gold and silver, and it's worth four hundred thousand dollars a ton.

PIERCE:
You don't say!

WILSON:

Yes! It's from the famous Tuscarora mine in northern Nevada, mined about fifty years ago. Don't put it in your pocket!

PIERCE:

Thought I could get away with it! I'd certainly like to though, Sam, and a lot more of it. You fellows here in Nevada must have good consciences to keep you from high-grading.

WILSON:

We're honest guys over here.

PIERCE:

Well, say, doesn't the university do assaying for prospectors in the state?

WILSON:

Yes, the state analytical laboratory is connected with the school. Any prospector may send in ore from any part of the state and have its metal content determined free. The "lab" makes about thirty thousand determinations a year, and some mighty good mines have been discovered that way. The state bureau of mines, too, is operated in connection with the mining school. It's a clearing house for information about Nevada's mineral deposits. The United States Bureau of Mines rare and precious metals station, also is right here on the campus, and we students often consult its experts.

PIERCE:

That's fine, Sam Wilson. But Professor Carpenter, mining is not the only engineering school at Nevada, is it?

CARPENTER:

Oh, no! As a land-grant university, Nevada also has the other standard engineering schools --- electrical, civil, and mechanical ---- and their graduates have taken a large part in the state's life. Many of those fine Nevada highways you rode over in coming to Reno were constructed under the direction of Nevada civil graduates. And electrical graduates are operating much of Nevada's electrical equipment, while the mechanicals, too, are employed in the state's industries. In any state which boasts Boulder Dam, the greatest mass of concrete in the country, electrical, civil, and mechanical engineering would have to be important.

PIERCE:

Thank you, Professor Carpenter, and you too, boys, for telling us about your splendid engineering school of mines here at Nevada. There's no doubt Nevada is a land-grant college when it comes to mechanic arts.

But not only agriculture and engineering are taught at Nevada. Graduates of the school of home economics are making future homemakers as teachers in most of the high schools of the state. The school of education, provision for which was made in the state's constitution, likewise sends from this campus a large percentage of the state's teachers. Students who have completed the course in industrial chemistry have gone into the state's industries. Many of the state's editors and newspapermen and women are products of the University's training in journalism. For many years, its premedical course and pre-nursing training have turned out young men and women who have won high honors for the state in the medical and nurs-

Thus, over a century ago, Thomas Jefferson started a revolution in educational thought which became the inspiration for Professor Jonathan B. Turner of Illinois in his plan for state industrial universities, first publicly advanced in 1852. Turner's plan became operative through the efforts of Senator Justin S. Morrill of Vermont in obtaining the passage by Congress and the approval by President Lincoln of the Land-Grant College Act of 1862.

Under the terms of this act, through public land grants, provision was made for the establishment and support of colleges of agriculture and mechanic arts in each state. Nevada was one of the first states admitted to the Union following the passage of the act, and, consequently, when her constitution was drafted, a provision was contained therein authorizing the establishment of a land-grant university.

The first twenty-five years of the land-grant college movement was marked by many trials and tribulations. Older institutions of higher learning, imbued with the classic traditions, held the newcomers in contempt. On the other hand, farmers ridiculed any effort to teach agriculture in the classroom, while laboring men questioned the idea of imparting a knowledge of mechanic arts, except through the apprentice system. Challenged as to their ability to render the service for which they were created, the colleges soon learned that their survival depended in a large degree upon their ability to discover and impart new information, particularly in the field of agriculture. The classroom thus in a measure gave way to the laboratory, with both professors and students enlisted in the search for new facts.

In 1887, Congress formally recognized agricultural research as a function of the land-grant colleges, equally important with teaching, by passing the Hatch Experiment Station Act. These state experiment stations of the land-grant colleges, thus established and working in cooperation with the United States Department of Agriculture have accumulated a body of information during the last half century which has been of fundamental importance in developing the agricultural resources of this nation. Knowledge in animal and plant breeding, insect pest and disease control, soil fertility and erosion control, has served to greatly increase the productivity of the nation's farms, while new knowledge in the principles of farm management, crop adjustment, and cooperative marketing has pointed out the road to improved farm income.

Following the establishment of the agricultural experiment stations, the colleges took steps to make the newly acquired facts available not only for classroom instruction, but farm people generally. This preliminary work was instrumental in causing Congress to pass the Smith-Lever Act of 1914, which created the cooperative extension service, representing both the land-grant colleges and the United States Department of Agriculture, with provision for county agricultural agents, home demonstration agents, and boys and girls 4-H club agents to serve the farm people of each state and territory. Thus, in cooperation with organized groups of farm people such as the Farm Bureau, Grange, and Farmers Union, have the campuses of the land-grant colleges been broadened and extended to reach the farm men and women and boys and girls in every rural county.

Federal aid has not yet been extended to the land-grant colleges for engineering research, and they have been compelled to enter this field with such assistance as their state legislatures could give them. Fortunately, their efforts in

this direction during the past seventy-five years have been greatly supplemented through the research of private foundations and the great industrial concerns.

Drawing from all of these sources for instructional material, the land-grant colleges have been able to train a group of men in civil, chemical, electrical, mechanical, and mining engineering who have played a leading part in developing the industrial resources of our country.

The University of Nevada, from whose campus we are speaking today, and a majority of the other land-grant institutions throughout America, have completed fifty or more years of service to the citizens of their states and to the people of the nation as a whole. They have been both the discoverers and imparters of knowledge in the fields of agriculture, homemaking and industry. Created in a spirit of service, they and their faculties have served well with the tools available to them.

A changing world is daily bringing new problems to American agriculture, commerce, and industry. These problems must be solved, if we are to have a contented, prosperous, and enduring nation. In meeting this obligation, the land-grant colleges may be counted upon to do their part.

ANNOUNCER:

Yes, President Creel, there is no doubt that democracy has come to higher education.

MIXED CHORUS:

"Hail! Proud Nevada", with organ accompaniment.

ANNOUNCER:

University of Nevada students, faculty, and alumni have saluted President Creel and land-grant colleges everywhere with their own stirring song----"Hail! Proud Nevada" by Jane O'Sullivan.

ORGAN:

Continues "Hail! Proud Nevada", - fade to background.

ANNOUNCER:

So, we take leave of the University of Nevada, a pioneer university established and supported by a people few in number but high in standards and aspirations

Through the many years of its history, it has kept flaming on this hill the search for truth and has imparted it to Nevada's youth in the classroom and laboratory and to Nevada's people, through its faculty and its graduates, in their homes and industries. Like all land-grant universities and colleges, it has recognized that its function is service to the people of its state.

ORGAN:

"Hail! Proud Nevada!" - Up and out.

ANNOUNCER:

This program portraying the development of that spirit of service through the years has been produced by students, alumni, and faculty of the University of Nevada. Professor A. L. Higginbotham wrote and directed it, while Professor Theo-

dore Post arranged the music and Professor William Miller was in charge of the dramatic episodes. Your announcer is Jennings Pierce.

TRUMPET QUARTET:

Fanfare from Rubank fanfare collection.

ANNOUNCER:

So we must say goodbye to the hospitable campus, faculty, and students of the University of Nevada -- the latest institution to join the parade of Land-Grant Colleges and Universities on the National Farm and Home Hour. We return you now to Chicago.

CHICAGO

HOMESTEADERS' ORCHESTRA:

"Covered Wagon Days" by Morrissey and Burrows.

ANNOUNCER:

With the playing of "Covered Wagon Days" of Morrissey and Burrows by the Homesteaders' orchestra, this program comes to a close.

ANNOUNCER:

You have been listening to the National Farm and Home Hour, which today has featured the University of Nevada in a land-grant college program. This is the National Broadcasting Company.

STATION IDENTIFICATION: