

From "Tales of the Old Frontier.")

Across the white plain the heat waves ammered and danced. Mirages of cool lakes appeared, mocking their thirst, and vanished. In the background stood a range of black-walled mountains through which the emigrants could see no opening. And this was Christmas day, 1849!

Early in the spring they had left the Middle West, 100 wagons strong, for the gold field of California. Then the fatal decision of a part of the train to try a short cut across the mountains had brought them into this valley whose floor was more than 200 feet below the level of the sea. In it they wandered for weeks of forment.

Again the party split. One group, 36 ersons in all, young bachelors from llinois who called themselves "The Jayhawkers," pressed on toward the mor tains. Some of them died of starvation tains. Some of them there went mad and some of thirst and others went mad and wandered away into the desert. In all 13 perished before they fought through

13 perished before they fought through to safety.

The other party, men with families, found a tiny spring and camped there to rest. Then food supplies ran low. Their oxen began to die and their wagons to fall apart in the blistering sun. So Asahel Bennett, their leader, sent two young fellows, Will Manley and John Rogers, forth to find a way out of the trap. As they departed Mrs. Bennett gave Manley a double handful of rice—half of all she had— and silently pointed to the hunger-pinched faces of her children.

her children.

The emigrants now sat down to wait for the return of the two scouts. A week passed—two—three—and still they did not return. At the end of the fourth week all except Asahel Bennett's wife abandoned hope. "They will come back," she declared steadfastly. But they did not, and the emigrants resolved upon one final desperate attempt. They began stripping the canvas covers from the prairie schooners and making pack saddles to cinch upon their emaciated oxen. And then Manley and Rogers returned!

dies to cinch upon their emaciated oxen.

And then Manley and Rogers returned!
They spoke but briefly of the days of
horror spent in struggling from one
waterhole to the next across the 250
miles of the Mojave desert, of the dead
of the Jayhawker party whom they
found along the trail. But they had
brought food and, most vital of all,
they had found a way out.

They guided the party on the long

they had found a way out.

They guided the party on the long climb to the summit of the Panamint range. As the emigrants reached the treat and looked back into the inferno from which they had escaped, Asabel Semnett's wife raised her arms in a gesture of farewell. "Good-by, Death Valley!" she cried.

And thus it was named.

By ELMO SCOTT WATSON



N THIS valley the heat waves still shimmer and dance across the sandy waste; the mirages still appear and then vanish; and the sun still blazes down to make it the

hottest place found in all the world in mid-summer, with recorded temperatures of 137 in the shade and 160 in the sun. But how different is its reputation nearly a century after Asa-

park in Maine and Mesa Verde in Colorado, come to Death Valley. Here is a winter playground for you. Come, enjoy it."

For Death Valley is now a national monument, administered by the national park service of the department of the interior. And so every year, from October to May, thousands of Americans respond to their Uncle Samuel's invitation. For the fear of danger or even of discomfort in this lost world of lonely desert wastes, of harsh, barren mountains, of brooding silences, is no longer present there. Over the roads and trails once marked by the bones of pioneers, thousands of automobile tourists now drive in safety, finding there tourist camps, garages and gasoline stations and the ever- present roadside stands.

#### It's "Life Valley" Now.

The silence of the desert is no longer broken only by the winds which sweep down from the mountain tops and stir the everchanging sands. The music of resort hotel orchestras blare out and echo from the slopes of the Funeral range or the Panamints. Moreover, Death Valley, once inhabited mainly by snakes and lizards, now has a permanent human population of nearly 200the last census figures show that, Some of them have built luxurious homes there and they, with the thousands of tourists who come every year by auto-mobile, by railroad, by bus line -yes, even by airplane-, have transformed Death Valley into Life Valley.

Dramatic as is the incident which gave Death Valley its name, scarcely less dramatic is the story of how the borax in-dustry, which spread the fame of Death Valley, got its start in this region.

In 1880 Aaron Winters lived with his wife, Rosie, in a frontier home in Ash Meadows, a tiny oasis east of Death Valley. To their home one day came wandering prospector who told the Winters of the borax deposits in the state of Nevada and how a great fortune awaited anyone who could find more such deposits. Winters asked many questions, including the question of how a person could know borax if he discovered it. He was told that the best test was to pour certain chemicals over the supposed borax deposit and then to



THE DEVIL'S GOLF COURSE-An expanse of salty deposit, crysfallized into weird and fantastic shapes, varying in height from an inch to three feet and more, it is a striking testimonial to the fact that the floor of Death Valley was once a great inland sea.

hel Bennett's wife christened it

with that dread name of Death Valley! There was a time when most There was a time when most Americans believed the saying "See Death Valley and die!" But that has been changed since Uncle Sam has been saying to his children: "After you have visited the Great Smoky mountains in North Carolina, Yellow-sione park in Wyoming, Acadia fire it. If it were borax the chemicals would burn with a green flame.

"It Burns Green.!" Winters had made many visits into Death Valley, and after talking to the prospector was convinced that there was borax there. So he set out immediately, accompanied by his wife, and soon afterwards encamped on Furnace creek. In the marsh creek in the spring) he gathered the most likely-looking deposit

That night he made the test as the prospector had told him. There was a breathless moment of suspense and then Aaron Winters cried "Rosie, she burns green! We're rich!" The borax industry of Death Valley had come into existence.

The next problem was how to get the rich borax deposits out of the valley. Out of necessity came the famous 20-mule team wagons

named "Rufus," saved the lives of between three and four hundred travelers in the Colorado and Mojave deserts as well as

Death Valley.
Then in 1917 Death Valley "got him" at last. During one of his trips he came to a spring which he had always used and drank from it. He offered some water to Rufus, but the dog refused to drink. The spring had become infected. After a terrible trip to his home in Pasadena, where Mrs. Beck awaited their return,



OLD TIMERS' GRAVES-These two simple slabs of wood mark the last resting places of two of Death Valley's best beloved characters: Jim Dayton, a driver of one of the famous 20-mule teams, who was buried on the spot where he perished in 1898 with all of his team, and "Shorty" Harris, who outlived him by nearly four decades, and was laid to rest, at his expressed desire, beside his buddy.

which are inseparably associated with the name of Death Valley. But borax is not the only wealth which this valley contains. Gold was discovered there many years ago and it has been the favorite haunt for the oldtime prospector. Perhaps the most famous of these prospec-tors—certainly the most publicized-was the man who became known as "Death Valley Scotty." He was Walter Scott, an excowboy and once a champion h rider with Buffalo Bill's

Wild West show.
Every so often "Scotty" came out of Death Valley with a pocket full of gold. He was believed to have a secret mine and certainly its wealth seemed to be inexhaustible. He hired special trains to take him to Chicago or New York. When he came town he threw money out of hotel windows and traffic jams caused by scrambling people resulted. He built a desert palace which was said to have cost more than \$2,000,000. He found other and new ways of "blowing" his money-all of which landed him on the front pages of newspapers all over the country and became a perpetual adver-ement, an official "press agent," for this region which re-mained a land of mystery for

# The Good Samaritan.

Another picturesque figure in the history of this region was the man who became known as the "Good Samaritan of Death Val-Lou Westcott Beck was name and he was one of the great number of men who sought wealth in this valley of death. But instead of finding his fortune he nearly lost his life in its barren wastes. When he finally escaped he resolved to devote his life to saving others from the fate which had almost been his.

Each summer Beck made a trip into the valley of purple mist and great thirst, piling up rocks and placing signs on them to guide prospectors to waterholes, searching for lost trav-elers and guiding them to safety. For 13 years he did this work and during that time he and his companion, a Newfoundland dog

"Good Samaritan" went to bed ill and never rose again. The work which he inaugurated was carried on by the United States geological survey which erected the numerous sign posts that saved the earliest tourists from suffering the fate of so many of the pioneers in the valley.

Another interesting character

in Death Valley history was 'Dad' Fairbanks who won fame as the "official rescuer" of the region. During his career in that saved the lives of more than 50 persons who had



DEATH VALLEY SCOTTY

become lost in the desert. He called the buzzards, which wheel in great circles over the valley,

"When the buzzards fly low and hover over one spot, I know some animal is in distress" he was accustomed to explain, "But when they hover high I know some human being is weaken-ing under the blistering sun and needs my help out there in the desert." So to the lore of Death Valley is added the ironical fact that these birds more than once robbed themselves of their meal because their method of flying revealed to "Dad" Fairbanks' keen eyes the fact that a human being was in distress.

Western Newspaper Unite

# Keeping Up

By Science Service

# Samples of Ocean **Bottom Obtained** by a New Device

WASHINGTON.-Samples of ocean bottom gouged out of ten feet of solid mud or silt by a new type of apparatus have been undergoing analysis at the Carnegie Institution of Washington. They are expected to tell new stories of the geological and biological history of the depths, hitherto hidden because no previously existing form of apparatus could do more than scoop up a superficial handful of material from the ocean

The device, called a core sam-pler, has been developed in the laboratories of the Carnegie institution by Dr. Charles A. Piggot of the geophysical laboratory. It consists of a short, thick-walled cylinder with a plunger that can be driven forward by a charge of cannon powder. At-tached is a ten-foot tube of tempered steel, which is called the bit. When this sampler comes into contact with the bottom, the powder is exploded and the bit is driven into the ocean floor.

#### Sample Comes up in Tube.

The bit is lined with a thin brass tube, which is removable. ocean bottom sample remains in this, to be corked up and filed away for study in the laboratories on A new lining is shoved into the bit, the powder chamber in the gun reloaded, and the sampler is ready to take another bite.

The first real deep-water samples were taken through the co-operation of one of the great commer-cial cable companies, which had to send out a powerful repair ship, the Lord Kelvin, to mend a break in a trans-Atlantic cable.

# Cystine's Presence Is Necessary for **Growth of Cancer**

WASHINGTON.-Cancer tissue, contrary to generally held opinion, requires the same sort of protein nourishment for its growth as normal tissue does. Experiments showing this are reported by Drs. Carl Voegtlin, J. M. Johnson and J. W. Thompson, of the United States public health service's national Institute of Health, in Public Health Reports.

The results of the studies, in which the growth of cancers in mice were checked by certain types of diet, cannot be applied in the treatment of cancer in man, Dr. Voegtlin emphasized.

New fundamental knowledge of the chemistry of cancer growth, however, has been gained.

# Needs Cystine to Grow.

The growth of breast cancer in mice can be checked, Dr. Voegtlin and associates found, by feeding the animals a diet deficient, though not entirely lacking, in cystine. This chemical is an amino acid, one of the essential building stones of all tissue proteins. Cystine is also part of another chemical, glutathione, which is widely distributed in body

After the cancer growth in the mice had been checked for about a month by the diet deficient in cystine, repeated injection of glutathione caused a marked stimulation of the cancer growth. This shows that glutathione is necessary for the rapid growth of cancer tissue just as it is apparently necessary for growth of normal tissue.

#### Old Lady of Ice Age Found in California

LOS ANGELES .- An Old Lady of the Ice Age is America's newest claimant for the title of oldest in-

Unearthed near here by federal WPA workmen, the skull and other bones of the ancient individual have been identified by anthropologists as belonging to "a female well ad-vanced in years."

Dr. A. O. Bowden and Ivan Lo. patin, anthropologists of the University of Southern California, have reported the verdict to the journal

The skull when unearthed early in 1936 attracted quick scientific no-tice because, in the same geologic stratum of earth, bones of a mam-moth were discovered. Dr. Bowden concludes that the 13-foot blanket of earth covering the ancient woman and the elephant has not been disand the elephant has not been dis-turbed, and that the old woman must have seen with her own eyes the strange big animals such as mammoths and saber-toothed tigers in the closing days of America's Ice Age.

# Students in College Suffer Severely From Evestrain

Damage to Vision in Four Years Measured

THE student pays dearly for a college education when, in addition to financial costs, he gives up part of his precious eyesight. It has long been suspected that four years of close and long attention to books might impair the vision. Tests of grade and high school students have been made to determine the effect of school work on eyesight, but there has been little actual knowledge of what happens to the eyesight of college students.

The extent of damage to vision resulting from the strain on the eyes incurred in obtaining a college education has now been measured on one thousand University of Minnesota students.

#### Many Defective at Start.

Of these thousand, about one in six had seriously defective vision on entering college, Dr. Ruth E. Boynton, associate professor of pre-ventive medicine and public health at the university, found. At the end of the four years in college, this percentage had increased. About one in four of the students had seriously defective vision at the time of graduation.

Most of these students were en-

rolled in the medical school or the college of education. Upon entering the university, eye examinations showed that about half of them had normal vision. About another third (30 per cent) had slight defects in vision, and 18 per cent, not quite a fifth, had serious defects in vision. The number with seriously defec-tive vision increased to nearly a fourth (24 per cent) by the time of graduation.

College work was hardest on the eyesight of those students who started out with the greatest visual handicap, Dr. Boynton told a confer-ence of the National Society for the Prevention of Blindness.

# Few Hormones Are Employed by the Pituitary Gland

WASHINGTON. - The pituitary, master gland of the body, playsits part in growth, sex, maternal instinct and other acts of life's drama by means of only a few instead of many hormones or chemical messengers-three or four at the most instead of twelve or more.

This revolutionary idea of the number of hormones produced by the pituitary gland appears in a re-port by the Carnegie Institution of Washington of the activities of mem-bers of its staff engaged in research on the endocrine glands.

For years the pages of scientific literature have been crowded with reports of new-found activities of the pituitary gland. Each of these, it was thought, was due to a separate hormone produced by the gland for the particular activity observed. Besides growth and sex, the gland affects the body's use of sugar and water, the activity of the thyroid and adrenal glands, milk production and maternal instinct.

## Prolactin a Busy Hormone.

The latest studies seem to show hat many of these activities are due to a single hormone of the pituitary, called prolactin because its first discovered effect was its control of milk production. This hormone now is reported to

be the one responsible for the pituitary's effect on sugar utilization and on the adrenal glands. With the thyroid-stimulating hormone of the pituitary, prolactin is responsible for the pituitary's effect on growth. It also affects the sex glands and, at least in some species, the liver. Carnegie scientists engaged in the

researches giving this new conception of the pituitary gland were:
Drs. Oscar Riddle, Robert W. Bates,
J. P. Schooley, G. C. Smith, E. L.
Lahr and M. W. Johnson. Research by scientists at other institutions contributed to the new picture of the powerful and versatile pituitary gland.

# Ancient Corpse's Last Meal Under Microscope

BERLIN.-The last meal of a corpse many centuries old, found in a bog where acid water had preserved the body against decay, has been made the subject of scientific examination by Prof. Fritz Netolitzky of the University of Czernowitz,

A sample of the contents of the digestive tract, on microscopic study, proved to consist mainly of rye and millet, both very badly threshed and ground. There were also traces of some kind of a pod vegetable, possibly peas.
Professor Netolitzky's somewhat

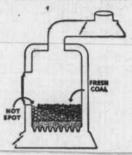
macabre research is regarded as of real scientific importance in con-nection with the history of grain cultivation in northern Europe in prehistoric time.



Refueling Furnace Fire Correct Way Means Most Heat at Lowest Fuel Cost

THERE'S an art in refueling a furnace fire that enables you to get the most heat at the least cost. There's more to it than just scooping up a few shovelfuls of coal and tossing it into the firepot. The economical way is simple.

Shake the grates gently when necessary. Don't do it vigorously and shake a lot of live coals into the ashpit. When you see a slight red glow in the ashpit, stop shaking. Then pull a mound of live coals from the rear to the front of the firebox, just inside the firedoor, using your shovel or a hoe. Don't disturb the ash under the



live coals. That gives you a fire bed sloping down from the edge of the door to the rear.

Now, shovel a charge of fresh coal into the hollow toward the back of the furnace, being careful to leave a mound of live coals in front. These live coals ignite the gases rising from the contact of the fresh and hot coal, causing them to burn.

Finally, when these gases are thoroughly burned, clean the ash-pit and reset the dampers. The turn damper in the smoke pipe, remember, should be nearly closed. The check damper should be entirely closed. The ashpit damper should be open. Open the slide in the firedoor only about the width of a wooden match.

That's the way to refuel economically and the best way to obtain the most satisfactory results.

## Foreign Words and Phrases

Ad Kalendas Graecas. (L.) At the Greek Kalends, never (the Greeks having no Kalends).
Bel esprit. (F.) A brilliant mind.
Compos mentis. (L.) In posses-

sions of one's faculties.

De novo. (L.) Anew, afresh.

Esprit de corps. (F.) Loyalty to

one's comrades; the spirit of solidarity. Improvvisatore, improvvisa-

trice. (It.) An impromptu poet or Mauvaise quart d'heure. (F.) A

bad quarter of an hour; an awk-war or uncomfortable experience.

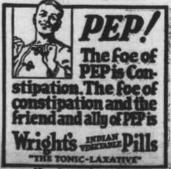


Be Worthy The only way to compel men to speak good of us is to do it.-Vol-taire.

# Still Coughing?

No matter how many medicines you have tried for your cough, chest cold or bronchial irritation, you can get relief now with Creomulsion. Serious trouble may be brewing and you cannot afford to take a chance with anything less than Creomulsion, which goes right to the seat of the trouble to aid nature to soothe and heal the inflamed membranes as the germ-laden phlegm is loosened and expelled.

Even if other remedies have falled, don't be discouraged, your druggist is authorized to guarantee. Creomulsion and to refund your money if you are not satisfied with results from the very first bottle. Get Creomulsion right now. (Adv.)



25c a box at drugglets or Wrights Pill Co., 10c Gold St., N.Y. City.