

Seek to Recover Oil Now Wasted

Bureau of Mines Survey in California Shows 2,359,100 Barrels Could Be Saved.

WOULD BE WORTH \$3,500,000

One Company Says Loss Between Well and Storage Tank Is 40,000 Barrels Monthly—Oil Lost in Seepage Along the Ditches.

Washington.—The great demand for petroleum, resulting chiefly from the increase of oil-burning devices and motor-driven vehicles, forces producers to take advantage of every opportunity to increase its production by seeking new sources of supply, and, what is more important, to use new methods for saving more of the oil brought to the surface than has been retained heretofore. As in other kinds of mining, it is thought possible that a large additional recovery can be obtained at a profit by working over the wastes in certain fields and by using more economical methods of production in the future, says A. R. Elliott, assistant petroleum engineer, bureau of mines.

A survey of the oil districts of California was made by the bureau in order to ascertain whether the visible masses of wasted oil-bearing sands would be a profitable source of supply. From the data collected it is estimated that 2,359,100 barrels of oil valued at more than \$3,500,000, could be obtained from the sandpiles about producing wells and from the outcroppings in the vicinity of the fields. Also, many times that amount of oil scattered over nearly the total oil-producing area might be recovered from seepage.

Wasted Through Seepage.
A paper issued by the bureau of mines in 1914 said: "It is probable that 10 or 15 per cent of the total gross production of the state has been wasted through seepage or evaporation." This represents a loss of 15,000,000 barrels of oil yearly. Probably one-quarter to one-half of this amount seeps into the ground.

As a possible means of recovering a large amount of oil from these wastes, the following should be considered, says Mr. Elliott: (1) Recovering oil left in the sand that it produced with the oil; (2) reclaiming the oil that seeps into the ground through waste in production; and (3) mining and treating the material in oil-bearing outcrops and asphalt beds that occur in certain sections of the state.

In the early days of a productive field, the rush of gas into a new well frequently sucks oil and sand with it in large quantities. Oftentimes adequate means of holding in the well are not available, and the oil is per-

mitted to flow "wild" until the gas pressure diminishes enough to enable controlling the well. This may require days or even months, says Mr. Elliott. There being no commercial use for this oil-saturated sand, it is removed from the immediate vicinity of the well or otherwise disposed of as valueless.

Throughout many of the oil districts of California, particularly in the San Joaquin valley, a noticeable feature is the large cone-shaped mounds near each of the wells where sand is produced with the oil.

Sand Rises With Oil.

In wells where the sand is loose and fine-grained and agitated by a high gas pressure, naturally a greater amount rises to the surface with the oil. In the Sunset field, wells with high gas pressure have produced more than 5,100 tons of sand in two to four years, representing nearly two-thirds of their gross production. In the Midway field there is a well producing about 500 tons a month and wells near it with an output nearly as large. In the Kerne River and West Side Coalings fields the oil is of heavy gravity and, with the aid of an agitator such as air, large amounts of sand are lifted to the surface. Each well yields ten to twenty-five barrels of oil daily; the proportion of sand carried with it varies between 20 and 60 per cent, and probably averages 40 per cent of the gross production. The amount of sand per well, because of the small oil production, is small, but owing to the great number of wells in these districts the aggregate amount is large.

Where wells produce only a small amount of sand the so-called sand boxes are frequently used. The sand box is a long, narrow, open trough closed at the ends and fitted with baffles running crosswise to the flow. The oil flows slowly over the sharp baffles, the sand and emulsion settle

to the bottom of the box and are shoveled out as often as necessary.

Also in the districts that produce heavy gravity oils, a convenient way of separating the sand and oil is to permit the oil to flow through long open ditches to reservoirs, where the free oil is removed by a suction pump. Evidently, great quantities of oil can be wasted through seepage along the ditches and around the reservoir. If some accurate method could be used to compare the amount of oil as it came from the well with the amount actually recovered, the difference would be surprisingly large. It is reported that the loss between the well and the field storage tank of one large producing company is approximately 40,000 barrels a month. Other companies report a proportionate amount.

Works of Art, Stolen by German Army, Reappear

London.—Numerous works of art, heirlooms and jewels stolen during the war by the Germans in occupied territory are gradually coming to light and in many cases finding their way back to their owners. The Rumanian papers publish the story of a cache of stolen works of art which the police have found in the Transylvania home of the father of a onetime Hungarian officer.

Ninety-two well known paintings, eight vases and two onyx clocks were found at the home of a mine manager, who said they had been given him by his son on his return from the war. The son was an officer in the Hungarian artillery, and had fought on the Cambrai front.

The objects d'art were found to have been taken from the chateau of the Prince de Chimny, near Cambrai, and were returned to their owner. Some of the pictures, including works of Joseph Berger, Millet and Van der Helst had been hacked out of their frames and badly damaged.

NEWS OF STATE TERSELY TOLD

Recent Happenings in Nebraska Given in Brief Items For Busy Readers.

Prairie hay is selling at Callaway for \$5 a ton.

An oil well is being sunk on the Hamilton farm near Blue Springs.

Mrs. T. E. Pallet of Callaway died suddenly at a hospital in Grand Island. The Buffalo county fair will be held at Kearney August 30 to September 2. The district convention of the state Kwanis clubs will be held in Omaha April 14.

Levels are being taken for Arapahoe's first paving project and a sewage system.

The Ord schools are arranging an extensive exhibit of school and industrial work.

Miss Helen Tracy of Pawnee City is dead of blood poisoning caused by a carbuncle on the lip.

Drs. J. Jones and R. G. Cressman have been appointed members of the pension board at Hastings.

Rev. W. C. Kelley of the M. E. church at Geneva has accepted a call to the pastorate at Cambridge.

Fifteen automobiles were wholly or partially destroyed in a fire at Omaha, originating in a clothes closet.

Revival meetings are in progress at the Christian church at Burwell under leadership of Rev. A. S. Reeves.

Rev. W. P. Hieronymus, A. B., Columbus, O., has accepted the call to the presidency of Hebron academy.

The site for the new city hall at Ord is still up in the air. A number of locations are under consideration.

Mrs. Mollie Mead, wife of Ed Mead, chief of the Hastings fire department, committed suicide by taking poison.

Albert Roberts, a 15 year old Wymore lad, had his right leg broken, when he was thrown from his horse.

Fire caused by defective wiring damaged the First M. E. church at Chadron to the extent of several hundred dollars.

A round-up of Gage county automobile owners who have failed to take out their 1921 licenses is being made by state agents.

Citizens of the Hastings neighborhood have organized the Adams county agricultural society, and will have a fair the coming fall.

The question of a municipal swimming pool, which has been agitated for some time by the Ord Community club, is still before the people.

The Atmsley city council will not grant a license to an open pool hall, consequently there are several such places in town run as clubs.

L. A. Morris of Aurora burned his hand severely when a can of roof cement he was opening caught on fire from spontaneous combustion.

Three Upland youths who spent the night in jail at Minden pleaded guilty to the charge of selling liquor and paid fines of \$100 and costs each.

The 50th anniversary of the founding of the First Congregational church at Crete was celebrated last week by a banquet in the church basement.

A broken knee cap was sustained by Henry Dickman of Plymouth, when his horse ran away and kicked him through the dash board of his buggy.

Maurice Wilson, Pawnee City high school student, was badly burned on the hands and about the face when the gasoline tank in his automobile exploded.

The home of William J. Duffin, three miles west of Greeley, burned to the ground, the fire starting from hard rendering in the oven of the kitchen range.

Owing to prevalence of small pox in that place, the Wymore city health authorities have recommended to the school board that all school children be vaccinated.

The pool hall at Harrison, operated by Frank Bierbover, was entered by burglars and the cash register robbed of \$30. All of jewelry on a punch board card was also taken.

At the declamatory contest in the McCook high school, eleven pupils took part. Miss Agnes Duncan was chosen to represent McCook high in the district contest in Arapahoe.

Mrs. Wallace Pitt, residing near Harrison, recently gave birth to her eighteenth child. This was the first girl, the remainder being boys. Eleven are living. Mrs. Pitt holds the record family in western Nebraska.

John Berg, a farmer living near Florence, was shot and instantly killed when he walked into a gun trap which he had set in his hen coop.

From the funds of the Ravenna Red Cross and Canteen Workers that place will be presented with a large bronze tablet, with the names of all world war men who enlisted from there.

The Grand Island chamber of commerce has made appropriation for the purchase of a loving cup to be given to the American Legion basketball team winning the state championship in the state contest to be held in that city March 21 and 22.

Oseola is taking under consideration the advisability of installing a municipal electric light and ice plant.

Two hundred fires in Nebraska during December and January cost two lives and did nearly \$250,000 worth of damage, according to the March bulletin of State Fire Marshal C. E. Hartford.

Early steps will be taken to have work commence on the extensive improvement of the municipal water-works system in Redfield, in accordance with the result of a special election a few days ago, when bonds of \$125,000 were voted for the purpose.

The golden wedding anniversary of Mr. and Mrs. G. S. Wallace was celebrated at their home in Exeter last week.

Several acres of spring grain have already been planted in the vicinity of Callaway, and the ground is said to be in excellent shape.

A mother and daughter banquet was held at the Methodist church at Fairbury one evening last week, plates being laid for over 200.

A movement has been started at Taylor to vote bonds in the sum of \$25,000, at the spring election, for the erection of a new school building.

Quick work on the part of the local fire department saved the Burlington depot of Morrill when fire broke out under the floor of the freight room.

Capt. A. M. Trimble, 82, died suddenly at his home in Lincoln. Captain Trimble at one time was department commander of the G. A. R. in Nebraska.

Henry Koenig dropped dead at the farm of his brother near Columbus. He had just left the house to do the milking when overcome by an attack of apoplexy.

A slipping tackle, hoisting stone cornice on the new Gering court house, let a block of stone fall, and Herman Sorensen, a workman, had his right hand badly crushed.

The Wheat Growers' Association of America will soon begin a campaign to get farmers to contract to sell their wheat through the association for five years in Phelps county.

To Saline county went the honor of topping all other counties in the United States in the "Better Sires, Better Live Stock" campaign for the quarter ending January 1, 1921.

Dr. C. C. Cone has recently stocked his farm on the Republican river in the north part of Furnas county with pheasants, which were received from the state game warden.

Fire of undetermined origin totally destroyed the Catholic church at Emerson. But few of the furnishings were saved. It is thought that a short circuit or defective flue caused the blaze.

"Beer is dead, and can never come back in Nebraska," said United States District Attorney T. C. Allen, when questioned as to the legality of brewing beer under the recent Palmer decision.

Elk Creek has made arrangements to buy electric power for lighting and power of the city of Tecumseh. A transmission line will be built the eight and one-half miles between the two towns.

The large statue of Abraham Lincoln presented to the Nebraska City high school by the class of 1920, has arrived and will soon be placed in position. The statue is seven feet and two inches in height.

D. E. Thompson of Lincoln, now in California, is the first individual in the state to donate a carload of corn to the Nebraska Farm Bureau federation for the gift-corn project to relieve suffering in Europe and China.

Secretary of State D. M. Amsberry, who suffered a slight stroke of paralysis a few weeks ago, is fast gaining strength, but his physicians have recommended that he remain quiet and leave his duties alone for a while.

Dr. B. L. Paine, a resident of Lincoln for forty-two years and at one time candidate for governor of Nebraska on the prohibition ticket, died Sunday in his rooms in a Lincoln hotel following a stroke of paralysis suffered last week.

While tending a power driven sausage machine in his butcher shop at Ravenna, Joe Smerda slipped, and in trying to right himself stuck his right hand into the blades which lacerated and maimed the fingers so that it was necessary to amputate them.

Despite the unfavorable conditions of last fall, the farmers of the Upper Loup country have on hand a large number of fat cattle ready for market in the near future. The amount of corn and hay on hand is surprising for the time of year, farmers say.

Miss Ruth Glasser, deputy county clerk, was painfully hurt when the automobile in which she was riding with her father and two sisters skidded on a slick covered road near Oseola and landed upside down in a ditch, pinning the occupants underneath.

Fontenelle chapter, Daughters of the American Revolution, will purchase an expensive memorial tablet bearing the names of Cass county soldiers who made the supreme sacrifice in the late war. The tablet will be placed in the Cass county court house at Plattsmouth.

Several deaths from scarlet fever have been reported at Grand Island.

In order to encourage poultry raising and the marketing of a better quality of products, several of the large produce companies of the state have agreed to pay a premium for high-grade eggs. Eggs that measure up to the quality outlined by the State College of Agriculture as Nebraska Extra Firsts will command a price within 5 cents of the New York price for Fresh Gathered Extra Firsts, on the day of delivery at Grand Island, Crete, Omaha, Lincoln and other central points.

If the plan of the government to publish the names of slackers who dodged the draft is carried out, the names of 176 on the Gage county black list will be given to the public, according to Deputy County Clerk J. C. Emery, who served as executive head of the exemption board.

A two-car shipment of 1,295-pound steers which Pete Claussen of Bloomfield shipped to South Omaha last week, sold at \$9.00, top for the day on full loads. The cattle were bought as calves a year and a half ago, and had been on feed five and a half months.

JOSEPH A. YORK, well-known business man of Portland, Me., who says he feels twenty years younger and has gained sixteen pounds on four bottles of Tanlac. Declares he can now eat three square meals a day.



"I am now able to eat three square meals a day for the first time in two years," was the emphatic statement made recently by Joseph A. York, well-known business man and highly respected citizen of Portland, Maine. "I am now sixty-nine years of age, and in all my life I have never run across a medicine that I consider in a class with Tanlac. I have just finished my fourth bottle and this medicine has benefited me even beyond my greatest hopes. Besides gaining sixteen pounds in weight, I have been built up and strengthened until I feel all of twenty years younger.

"For the past two years I have been in a miserably run-down condition, and was compelled a short time ago to give up all idea of business as I was too weak to look after anything. I was nervous, worn-out, had no appetite, and suffered most all the time with indigestion. Some days I would eat scarcely anything; in fact I was afraid to eat because I knew I would suffer afterward. Sometimes I had such severe cramping pains after eating that I would almost die. My nerves were all unstrung and the least thing would worry me and I never could get a good night's sound sleep. In fact I just lost interest in everything and was greatly discouraged over my condition.

"The ordinary treatment failed to do me any good, and as I had read so many statements from people I know here in Portland who had been benefited by Tanlac, I decided to give it a trial. And now I know for myself what it will do, for I have simply taken a new lease on life. I am now able to look after my work as usual, and never feel better in my life. I am able to eat three hearty meals a day, and everything agrees with me perfectly. I eat anything I want and never feel a touch of indigestion. I never thought there was a medicine that could do me so much good, and I am only too glad to have the facts about my case given to the public."

Tanlac is sold by leading druggists everywhere.—Adv.

Motors Drive Out Horses.
The rapidly with which automobiles are superseding horse-drawn vehicles, has been proved by an experiment at a popular point of the state highway, at Burlingame, California, some 16 miles from San Francisco and one of the main arteries leading into the city. Keeping check at a given point from 6 a. m. to 8 p. m., it showed that 11 horse-drawn vehicles against 10,581 motor-driven vehicles passed in the 14 hours. Last year a much greater number of horse-drawn vehicles was shown in a similar experiment.

"Cold in the Head"
Is an acute attack of Nasal Catarrh. Those subject to frequent "colds in the head" will find that the use of HALL'S CATARRH MEDICINE will build up the system, cleanse the blood and render them less liable to colds. Repeated attacks of Acute Catarrh may lead to Chronic Catarrh. HALL'S CATARRH MEDICINE is taken internally and acts through the blood on the Mucous Surfaces of the System, thus reducing the inflammation and restoring normal conditions. All Druggists. Circulars free. F. J. Cheney & Co., Toledo, Ohio.

How Dates Grow.
The Arabs live almost entirely on this fruit when crossing the desert. The date is the fruit of the date-palm, which grows best in Persia, Palestine, Arabia, and the North of Africa. The stem reaches a height of 50 feet to 70 feet and throws on a magnificent crown of large leaves and a number of spadices. In the female plant these bear bunches of dates weighing from 20 to 25 pounds.

Important to Mothers
Examine carefully every bottle of CASTORIA, that famous old remedy for infants and children, and see that it bears the Signature of *W. D. Fitch* in Use for Over 30 Years. Children Cry for Fletcher's Castoria.

Impossible. "Does your husband give you all the money you ask for?" "Oh, no, he's not rich enough."

There is nothing more satisfactory after a day of hard work than a line full of snowy white clothes. For such results use Red Cross Ball Blue.

The world stands aside for the man who knows whether he is going.

Is Hard Place to Get an Education

United States Has Surprising Number of Illiterates, Say Congressional Investigators.

PAINT DISTURBING PICTURE

Millions of Immigrants in Country Can Neither Speak Nor Read English—Committee Finds American Teachers Are Incompetent.

Washington, D. C.—The United States of America is one of the hardest places in the civilized world in which to get a good education, in the opinion of a committee of the house which has been investigating the question.

A fourth of the men of fighting age in the United States are illiterates, many children never get adequate schooling, many of the teachers are incompetent. There are millions of immigrants in the country who can neither speak nor read English, and many negro children never see the inside of a schoolroom. Thousands of schools are closed because no teacher can be obtained for the miserable salaries offered.

This disturbing picture of education in America is contained in the report of the house committee on education on the Towner bill, and abundant proof of its truth is contained in the hearings which were held in connection with the bill.

This report is surely one of the most startling indictments of our civilization which has ever issued from Capitol hill.

Facts Which Convinced Them.
Here, briefly, are some of the facts which brought the congressmen to this frame of mind:

According to the census of 1910, there were in this country 5,500,000 persons ten years of age or older who could not read or write, and the committee does not believe that conditions have improved since then. In addition to these, there were 3,500,000 persons who could not read or write English, making a total of 9,000,000 in the land of the free who were no more qualified to exercise the right of the franchise than so many Australian bushmen.

The surgeon general's report showed that of the men called to service between the ages of twenty-one and thirty-one, nearly 25 per cent were practically illiterate. This means that a fourth of the young manhood of the country, which is its main reliance in peace and in war, is to all intents and purposes in a state of barbarism. Former Secretary of the Interior Lane estimates that the annual cost of illiteracy to the United States is \$325,500,000. The director of the bureau of mines states that if all of the miners could read and speak English a thousand lives a year would be saved.

The committee emphatically refutes the idea that illiteracy is confined to the South, and to out-of-the-way sections. It shows that while Georgia has 83,000 illiterates, New York has 400,000, and that Pennsylvania has more of them than Alabama. Neither does the idea hold good that the illiterates are chiefly negroes. There are a million more white illiterates than colored.

Of the 15,000,000 foreign-born in the United States, the committee says that 5,000,000 cannot read or write English, and that 2,000,000 cannot read or write any language.

Luck Decides Education.
The committee says that getting an education in the United States is largely a matter of luck, that the opportunity is not equal.

"In the South a large number of the negro children never see the inside of a schoolhouse," it asserts. "In the North there is hardly a city that has adequate school facilities for all its children."

The committee finds that in physical education our schools have failed even worse than in mental education.

The "provost marshal general's report revealed the startling fact that more than one-third of the men examined for military service in the late war were disqualified by reason of physical disability," it reports. "It also stated that 90 per cent of these young men could have qualified had they been taught the simplest rules of hygiene and health. It was ignorance, gross ignorance, that in the vast majority of cases was the cause of their incompetence."

The committee finds that American teachers are utterly incompetent, that 100,000 of them are less than 20 years old, that 30,000 of them have no education beyond the eighth grade, that 200,000 of them have less than a high school education, and that 300,000 of them have no professional training whatever. It finds that the average salary paid teachers in this country is less than the wages paid scrub women or ditch diggers.—Frederic J. Haskin in Chicago Daily News.

Long Chain of Family Grandmothers Broken

Arkadelphia, Ark.—A chain of grandmothers without parallel, in this section, at least, has been broken by the passing of Mrs. Emeline Eliza Riles, 82.

Before her death, two small children of Mrs. Eliza Hanson, her great-granddaughter, had six living grandmothers of whom two were great-great-grandmothers, two were great-grandmothers and two were just plain grandmothers. The oldest of the Hanson children is 3½ years of age. Thus there were at one time five living generations with less than seventy-two years separating the youngest from the eldest.

The Hanson children had beside their six grandmothers, nine uncles, four great uncles, two great-great uncles, four great aunts, two great-great aunts and forty second cousins, but no first cousins.

Town That Follows Nature's Path



Knoxville, Pa., a miner's colony on the outskirts of Pittsburgh, is a town built along the line of the least resistance, the houses being built in rows to follow the course of the hill. There are about one thousand houses in the group, all of one design. This photograph of the "winding town" was made from a near-by hill.