

# Motor Fuel is Real Problem

Temporary Gasoline Excess Now Does Not Solve the Question for the Future.

## UNMINED RESERVE LIMITED

If Oil Was Extracted From Ground at Rate Equal to That of 1920 the Reserve Would Only Last 13 Years.

By E. H. LESLIE, Associate Professor of Chemical Engineering, University of Michigan.

At present petroleum is being produced faster than it is used, and stocks of gasoline are increasing. Crude oil produced in Oklahoma has dropped in price from \$3.50 to \$1.00 per barrel, and the price of gasoline has been lowered several cents per gallon. But one should not be misled by the present situation, which is only a part of the business cycle through which we are passing. It is a peculiarity of the oil-producing business that the drilling of new wells reaches a maximum at the crest, or even after the crest, or the wave of prosperity. The result is an overproduction of crude oil in the time of depression. Prices drop, profits vanish, and new drilling stops. But within a year or two the pendulum swings the other way, and again there is a scarcity of oil due to the interruption of drilling in the time of depression. This cycle of events would take place even if there were an endless supply of crude oil underground.

**Real Fuel Problem.** The real motor fuel problem is not concerned with the swings of the business pendulum, although the present abundance of fuel is pointed to by superficial critics as showing how wrong have been the predictions of the scientists that have warned us of a future shortage.

The problem arises in part through the fact that the underground reserve of petroleum is limited. At present the unmined reserve of the United States is only about 5,800,000,000 barrels. Were this oil to be extracted from the ground at a rate equal to that of the year 1920, a feat that is quite out of the question from a practical standpoint, the reserve would only last 13 years. It is thus evident, however, that after a few years we must expect

## Stray Baggage Always Has Most Valuables.

New York. — "Every trunk that's lost contains diamonds, necklaces and all that," said the baggage man at the Grand Central terminal. "That is, they're supposed to. Anxious passengers whose trunks have been sidetracked tell us of all the wonderful things they contain. But the funny thing is that when the trunks are finally located it's usually found that dresses, shirts and things of that nature were about all that were in them after all. Many of those who reclaim their stray trunks tell us so themselves. Examination proves it in other cases. It just goes to show that the loser always exaggerates his losses."

a decline in the domestic production of petroleum.

On the other hand, the use of automobiles, tractors, trucks and gasoline engines is becoming more general. Today the total number of registered motor vehicles is over nine millions, an almost unbelievable increase in the short period of 25 years. What is more, the number is still growing, and will probably exceed 13,000,000 within a few years.

Where are we to get the fuel to run this vast number of cars?

The quality of market gasoline will not change greatly in the next few years, at least not until the automotive engineers perfect devices that will handle heavier and less volatile gasoline satisfactorily.

In spite of the fact that for several years the United States has produced two-thirds of the world's oil, we have recently been dependent upon foreign sources of supply of crude oil. Eighty per cent of the world's oil is consumed in this country. In 1920 our imports were 110,000,000 barrels, or 25 per cent of our domestic production. This oil came largely from Mexico. As the years pass, the United States will become more and more dependent upon imports of petroleum. This will mean higher prices and therefore necessitate more efficient utilization once the oil is in this country.

**Other Sources of Fuel.** What other possible sources of fuel are there? Has been heard of shale oil and of alcohol. Neither of these commodities will be important as motor fuels until many far-reaching developments have taken place. The development of a shale oil industry on a scale sufficient to furnish large quantities of motor fuel is an undertaking

## PASSION PLAY TO BE REVIVED

Oberammergau Committee Plans to Put on Thirty Performances of Great Spectacle.

## MANY PARTS TO BE GIVEN OUT

Some Who Played Leading Roles in Last Production Are Disqualified by Age or for Other Reasons—Lang to Be Christ.

Oberammergau, Bavaria. — Thirty performances of the Passion Play have been scheduled for 1922 by the committee of twenty-one which is directing the spectacle, but this number will be increased if the attendance demands, as was the case both in 1900 and 1910.

It will require an outlay of 1,500,000 marks to stage the Oberammergau play and the villagers are extremely anxious about the German political situation lest conditions be such that foreigners will not attend.

The 300 burghers, who constitute the descendants of the original peasants who made the vow to produce the play decennially, personally assume the responsibility for this expenditure, and the failure to attract sufficient visitors to meet the cost would result in the bankruptcy of practically the entire

## Green Apples Saved Boy Run Over by Automobile

Green apples saved Charles Mabley, twelve years old, of Duncannon, Pa., from serious injury, if not from death, when a good-luck horseshoe led him into danger.

The boy spied the horseshoe in the road, darted out to get it, and was struck by an automobile driven by Harry Bowman, chief of police of Hollidaysburg, Pa.

Mabley was dragged some distance and then let go, one wheel passing over his body. He had half a peck of green apples in his shirt which acted as a cushion and saved him from serious harm.

comparable to the creation of the whole coal mining industry of today. And to produce alcohol we must first have available suitable raw material. It is quite out of the question to make large quantities of fuel alcohol from food materials, such as grain and potatoes. Possibly wood may be the future source of alcohol, and reforestation of waste areas the means of supplying the wood.

Lastly, it is probable that necessity will be the mother of invention in methods of utilizing fuels. Present engines and devices for carburetion will be modified in such a way that where we now drive a car 10 to 20 miles on a gallon of gasoline, we shall later be satisfied only with 20 to 40 miles. The chemist will be called upon to study what happens within the engine cylinders and to find means of producing more salutary results.

Let us not allow the momentary oversupply of gasoline to blind us to the real situation. The co-operation of scientists, commercial interests, public and government is needed for the successful solution of the problem.

village, as the Oberammergau folk have slight resources.

Most of the burghers are wood-carvers, potters, painters, sculptors, farmers, merchants and small shopkeepers. Only the descendants of the villagers who were saved from the plague in 1633 take part in the Passion Play and assume responsibility for its production.

Next October will be a fateful month for then the names of the villagers who are to have the leading roles in the spectacle will be announced.

To be selected to enact the role of Jesus Christ or one of the apostles is a far greater honor to an Oberammergau man than election to the Presidency of Germany or any other office within the gift of the entire German people.

And any woman of Oberammergau would, far rather be chosen to play the role of Mary or Martha or Mary Magdalene than to be in the position of Frau Ebert as mistress of the President's palace in Berlin.

Many of the actors in the Passion Play next year will doubtless be the same as those in the cast when the play was last produced in 1910. Anton Lang, who enacted the role of Jesus Christ in 1900 and 1910, will probably be chosen for the part again, as he is still young enough to undertake the arduous task and looks the part so well that younger aspirants are not likely to displace him.

## Candidates for "Mary."

Ottile Zwink, who played the role of Mary in 1910, has married since that time. No married woman can play a role. Consequently all the young women of Oberammergau with ability and experience as actresses are eagerly trying to qualify for the highly important part. Paula Rendi, daughter of Peter Rendi, the sculptor, who was Joseph of Arimathea in the play of 1910 and enacted the role of St. John twenty-one years ago, is one of the most promising candidates for the role of Mary. Fraulein Redl has shown great ability in minor religious plays, which are produced constantly by the Oberammergau folk as a means of training actors for the Passion Play.

Maria Mayr, who played the role of Mary Magdalene in the 1910 production, also has married and is living in Chicago. Maria Schmid, who was the Veronica in the last production, also has married.

Eighty-two of the Oberammergau men died during the war, and many of the older actors of the last production will be disqualified by age for important roles. Consequently there are scores of places in the cast to which young men with ability as actors may aspire. They have begun to let hair grow. Wigs and makeup are not permitted by the directors of the Passion Play.

Practically all the older men who had important parts in the last production have never cut their hair. Many of them have retained their long beards and pride themselves on their resemblance to the biblical characters they have depicted.

## Editors Get Day Off.

Rio de Janeiro. — Work in newspaper offices in Rio de Janeiro between eight o'clock Sunday morning and eight o'clock Monday morning is prohibited under the provisions of an act passed by the municipal council.

## BOOSTING FOR LEGION MEN

Veteran of Royal Irish Rifles Seeks Recognition of Americans in the Canadian Service.

The German invasion of Belgium in August, 1914, found Mike Sullivan, veteran of the Royal Irish Rifles, managing a hotel on Broadway, New York. He chafed behind the register until a hot day in June, 1915, when he bade farewell to his wife and children, gave them the year's profits and sailed as a steward on a liner bound for Liverpool.

He worked his way to Aberdeen, Scotland, where, by citing his father's long service with the Gordon Highlanders, he persuaded the kilts to enlist him despite his forty-five years. Later he obtained transfer to the Eighty-third Royal Irish Rifles, with whom he had fought three years in South Africa, and sailed for France in August of 1915.

Wounded at Armentieres, he was sent back to the United States in 1916 as "unfit for service." He spent a period in Mount Clemens hospital, was discharged and set out for Canada, where he persuaded the Three Hundred and Fifty-fifth infantry, Canadian Expeditionary Forces, to take him on. Overseas his old wound caused trouble, and he was sent back to the United States again, "unfit," etc.

Arriving in America in 1918, he toured New York and vicinity for the Third Liberty loan, appearing in his kilts, singing trench songs and telling why the loan should be oversubscribed. With Congressman F. O. Hicks he likewise campaigned for the Fourth Liberty loan, resting up while the Victory loan was carried through to success.

Sullivan, a member of the American Legion at his home on Staten Island, recently appeared at national headquarters of the Legion to offer his aid in obtaining for Americans who enlisted with the Canadians the same privileges as have been accorded the U. S. E. F. veterans. Now he is in Canada seeking a hearing with Dominion officials in the matter.

## COMMANDS NEW S. S. 'LEGION'

Captain Corkum Soon to Make Trip to South America—Sent Two Subs Down.

Capt. Alex C. Corkum, commander of the new S. S. American Legion, which is soon to make its first trip to South America, is accredited with having sunk two German submarines while he was commander of the U. S. transport "Amphion" in naval transport service during the war.

Preparations are now under way for a two-day trial trip of the "American Legion" from Camden, N. J., where it was constructed by the New York Ship Building corporation for the United States shipping board. John G. Emery, national commander of the American Legion, together with other officials of the legion and representatives of this and other countries will be on board the ship during the trial trip.

Captain Corkum, besides his submarine sinking record, is famous for having established a new world's record for running time between New York and South America. The "American Legion" will be operated between New York and South American ports.

## EVERY MEMBER GET ANOTHER

Indications Are That Big Campaign Will Double Membership of American Legion.

The "every-member-get-a-member" campaign of the American Legion has begun, and reports received at the national headquarters at Indianapolis indicate that the purpose of the campaign, to double the membership, will soon be accomplished.

To double the membership of the Legion was the ardent wish of F. W. Galbraith Jr., late national commander, who was killed in an automobile accident at Indianapolis. His successor, John G. Emery of Grand Rapids, Mich., was probably the first member of the Legion to get a member when the present campaign opened.

Mr. Galbraith planned the campaign a short time before his death. He was anxious to have the membership doubled by October. It now appears that the campaign will end before that time.

In his statement setting out plans for the campaign, Mr. Galbraith said: "The Legion has earned the right to do something in a national way primarily in the interests of its organization, and the time has come to exercise that right. I propose that the American Legion shall exactly double its membership. A tremendous undertaking you say. Yes, tremendously simple. Just an intensive effort when every Legion member in the world shall go out, lay a firm but friendly hand upon a buddy and sign him up. Every member get a member—and the job is done."

# WRIGLEY'S P-KS

"AFTER EVERY MEAL"

WRIGLEY'S Newest Creation

10 for 5c



A delicious peppermint flavored sugar jacket around peppermint flavored chewing gum.

Will aid your appetite and digestion, polish your teeth and moisten your throat.

## The Flavor Lasts

POSSIBLY HER LAST CHANCE RECORD OF PLEASANT HOURS

At All Events, the Object of His Affections Perfectly Agreed With Her Fiance.

For several minutes the young man did not speak. His heart was too full. It was enough for him to know that this glorious creature loved him; that she had promised to share his fate.

With a new and delightful sense of ownership he feasted his eyes once more upon her beauty, and as he realized that henceforth it would be his privilege to provide for her welfare and happiness, he could have almost wept with joy.

His good fortune seemed incredible. Finally he whispered tenderly:

"How did it ever happen, darling, that such a bright, shining angel as yourself fell in love with a dull, stupid fellow like me?"

"Goodness knows," she murmured absently; "I must have a screw loose somewhere."

## His "Diplomacy."

"I say, dad," piped the small boy, "can I ask you a question?"

"Yes; go ahead," replied the indulgent dad.

"What's diplomacy, dad? I saw it in a book the other day."

"Diplomacy, my boy," said dad, with a patronizing smile, "means doing or saying precisely the right thing at the right moment."

"Ah! Then I was a diplomatist last night, dad?"

"Really, my boy. How'd you make that out?"

"Why, when mum came in with the castor oil, I rolled Bobbie into my place in bed and then rolled him back before she came round to the other side!"

From an Indian's standpoint it's America for everybody but the Americans.

If you are afraid to ask for what you want, the chances are that some one will hand you a lemon.

"Book of Night Life" Will Make Interesting Reading in the Years to Come.

The responsible position of the old family album has been usurped in the homes of an increasing number of modern young persons by the "Book of Night Life." The new volume is almost as large as the old family album. It is supposed to record the amusement meanderings of the young couple who keep it. Every theatrical program is brought home, together with the ticket stubs, and pasted in it, and the date of the performance inscribed at the top of the page.

Below each playgoer writes his and her opinion of the play with such observation as, "snappy music, but not much plot," "very sad, both of us cried," "leading man awfully conceited," and other pungent remarks. At the end of the season the "Book of Night Life" contains a complete record of the couple's evenings in search of amusement. Visitors find it extremely interesting.—Chicago Journal.

## A Celebrity Arrives.

"Great excitement in the local room."

"What's happened?"

"A beautiful woman has just shot a married man who wasn't married to her. The city editor has issued orders to get all her photographs available, from her babyhood to the one taken yesterday, and two men have been sent to arrange for exclusive publication of her diary. He has also called up a friend who is in the motion-picture business who is on the lookout for new stars."—Birmingham Age-Herald.

## Of Course.

Mamma—I wonder who has been in the sugar bowl while I was out? Elizabeth (four years old)—Well, I hope you don't suspect me. You know I'm too big to get in such a little thing as that.—Detroit News.

One little tombstone may tell a big story.

No hot cooking No trouble to serve

For breakfast or lunch, no food is quite so convenient or satisfying as

## Grape-Nuts

Served from the package, with cream or milk—full of splendid body-building nutrition. Its flavor and crispness charm the taste—a splendid summer food.

"There's a Reason" for Grape-Nuts Sold by grocers



## Gen. Pershing Decorates Stubby



Stubby, a brindle Boston bull terrier, in the office of General Pershing just after the commander-in-chief of American forces in Europe during the war had decorated him as a wounded hero. Stubby, who is the property of J. Robert Conroy of Washington, has been designated the official mascot of the A. E. F. He participated in seventeen engagements with the Twenty-sixth division, receiving a shrapnel wound in the battle of Selchprey. The medal was of gold and the gift of the Humane Education society. Stubby wears many other decorations.