

BY MARK REQUA

(Continued From Page 1) petroleum industry handling its own problems. A new theory is developing to the effect that the welfare of the public is paramount in that it does not pay to produce oil that has to be transported to the consumer without any limitation. In the words of the late Franklin R. Lane, Secretary of the Petroleum Producers' Association, "The petroleum industry is not a business to be run on a profit basis. It is a business to be run on a public basis. We do not even know how to produce a substitute for it, but we have not yet."

Historically, petroleum has been known since the very earliest dawn of history. It was not until the discovery of the Drake well that it became an important article of commerce. The petroleum age may be divided into three parts: The first, prior to the discovery of the Drake well; the second, from that time to the beginning of the automobile age; and the third, from that period down to the present. Of these three periods, the third is by far the most important.

The petroleum industry has an invested capital of about twice that invested in the steel industry. Of this amount five billion dollars is invested in the production of oil, three billion in refining, and roughly a billion and a half each in transportation and marketing. It is estimated that the United States produces and consumes about 70 percent of the world's production, and has only about 15 percent of the world's reserves. Both America, Russia, Persia, Mesopotamia and Mexico are the other great sources of petroleum.

Immense improvement has been made in the drilling of wells and the production of oil. The most significant improvement in the refining industry has been in connection with the cracking process, without which it would be impossible to supply the demand for gasoline. The average yield from crude in the United States last year was 41.3 percent. Known and proved reserves are estimated to amount to 200 billion barrels, or better, will shortly be obtained.

The production of natural gasoline from the compression of the gases issuing from wells has become a source of enormous importance. The whole picture of the industry is being revolutionized by the cracking process and the conversion of a larger and larger share of a barrel of oil into gasoline. There are practically no crudes today that cannot be successfully cracked, although the price feature is an important element and it will only be with a moderate increase in price that much of the crude now being diverted into fuel oil will be cracked into gasoline.

BY G. E. WOODS

(Continued From Page 1) 1929, after experience had been gained for two years' regular and reliable flying between Tokyo and Osaka. The route is divided into three sections, the first from London to Basle, the Mediterranean from Genoa to Alexandria, and the Near East from Alexandria to Karachi. The section between Basle and Genoa is a night train on account of the Alps and bad weather conditions in that region. The passenger leaves Crocyon on Thursday morning and flies to Paris with an intermediate stop at Tientsin, a three engine "Shen" flying boat which flies by way of Rome, Naples, to Cairo in the second night is spent. On the third day the same flying boat flies from Cairo via Athens to Paris. On the fourth day the flight is from Paris to Basle, the 6th from Basle to Genoa and on the 7th from Genoa to Karachi.

It is not intended that Karachi shall remain the Eastern terminus of the route. Ultimately it is expected that the line will extend all way round the World, bringing Australia to within probably 14 days or less from London.

BY KIYOSHI MUTO

(Continued From Page 1) suspension construction of central post in some of points of contact, the pendulum action of the central post is the reason why galvanic corrosion is not observed. But the suspension of the central post as shown in Akaiwa and Nikko is rather an exceptional type, and the central post of many galvanic rust upon the base stone, and it was that the above explanation is not true. Late Prof. Dr. F. Omer's explanation that the horizontal extension is necessary to prevent the tower from being overthrown in the event of earthquake shocks, in other words, pendulums are subject to horizontal overturning from earthquake shocks. But that that the period of the proper vibration of the tower is nearly equal to that of the destructive earthquake shocks, experience, shows the possibility of overturning or destruction by the coincidence of period. It is believed that the internal and external friction of composite material dissipates the energy of vibration and restrains the amplification of vibration in resonance. General equation of motion is as follows:

CHINESE DELEGATES TO THE ENGINEERING CONGRESS

(Tokyo, Monday, Nov. 23) Chinese delegates to the World Engineering Congress, which will convene in London, England, on Nov. 25, are expected to arrive in Tokyo on Wednesday, Nov. 27. The delegates, who are headed by Mr. Wang Jun-pao, are expected to arrive in Tokyo on Wednesday, Nov. 27. The delegates, who are headed by Mr. Wang Jun-pao, are expected to arrive in Tokyo on Wednesday, Nov. 27. The delegates, who are headed by Mr. Wang Jun-pao, are expected to arrive in Tokyo on Wednesday, Nov. 27.

Chinese delegates to the World Engineering Congress photographed on the occasion of a reception given them by the Chinese Minister to Japan, Mr. Wang Jun-pao.

Personals and Local Items

According to an information received recently in Yokohama, a party of 31 businessmen are leaving for Yokohama on January 15 next from Italy aboard the Kuroki Lloyd Trieste, leaving Trieste on November 15. The party intends to make an investigation of industry and commerce in Japan and will hold conferences at the Hotel Grand Central in Yokohama from Trieste, Italy. Among the party are included ten well-known Japanese. The reception programme at various ports in Japan now being prepared.

The N.Y.C. S.S. Shinjima Maru is one day behind her schedule, and will arrive at Yokohama on Monday morning at 6 o'clock from Seattle via Victoria, with a cabin passenger.

Commander Evangelista Booth attended the 15th anniversary of the founding of the United States High School at Kamakura, on Saturday morning with Commissioner Yamamoto.

The meeting of the Executive Council of the American Association of Tokyo, called for November 5, has been postponed to November 12, when it will be held at the American Club at 5:00 p.m.

The Annual Christmas sale by the Girl Shop of the Women's Society of Tokyo, called for November 5, has been postponed to November 12, when it will be held at the American Club at 5:00 p.m.

Mr. Andrew Segovia, the great Spanish guitarist, who has so successfully adapted himself to the guitar, will give a concert this evening at the Y.M.C.A. Hall in Yokohama.

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FUKUKURO STOVE Patented in Japan, Britain, U.S.A., Germany and France Fed with ordinary coal once, it supplies constant heat for 6 to 12 hours. FUKUKURO stove has 6 installed in Department of Imperial Household, various Government offices, and is receiving high praises for their neat appearance and efficiency. (Price): ¥18.00 to ¥100.00 (Catalog will be sent on request) Price of the FUKUKURO Stove: ¥22.00 per ton. Mitaya Co., Ltd. 4-chome, Motomachi, YOKOHAMA

was at All Saints' Church at 3:30 P.M. Mr. Bulmer gave the bride away. The bride was Miss M. G. G. of Tokyo and the groom was Mr. G. G. of Tokyo. The ceremony was followed by a reception at the home of Mr. and Mrs. Charles A. Atter, and by a wedding dinner in the evening at the Y.M.C.A. The couple are spending their honeymoon in Bessau. Both the bride and groom are connected with the firm of Messrs. Marcus, Harrie and Lewis. Mr. Bulmer is selling for Australia on November 12 on a five months' business trip. During his absence the bride will continue to live in her brother's home in Shiro.

The Dodge International Study Club which held Saturday evening at the Y. M. C. A. greatly enjoyed a dinner talk by Colonel T. G. Cradock, in which he described a journey taken last year from Paris to Palestine, tracing its route his experiences in traveling six hundred miles through the desert from Bagdad to Jerusalem in a motor car. His comments on the possibility and even the desirability of traveling in the desert were of considerable interest. Colonel Cradock believes that it is the second and third class travelers who really have the best knowledge of the country and the routes through which they are passing. Mrs. Pike of the American School spoke briefly on the results thus far obtained by the "Back to Palestine" movement among the Jews.

BY K. SUEHIRO (Continued from Page 1) made in parallel with the Mitchell sub. (1) The Ishimizu Accelerometer. An accelerometer as small as one ounce can be measured by this apparatus. (2) The Tubel Gravity Variometer. This is made of fused silica, and is portable. (3) The Wiersma Resonance Vibration Analyzer. This apparatus has been devised to detect the period of seismic vibration perpendicular in the district.

(4) Survey of Earthquake Districts. Just after the Tampo earthquake in 1927 the work of precise leveling and triangulation over the Japanese archipelago was suspended by the Army Land Survey Department, and was repeatedly carried out. The result of the survey was situated by Terada and Tsuboi, and several important facts were ascertained. Terada was also done just after the Tampo earthquake in 1927 and the recent earthquake in 1928. (5) Model Experiments of the failure of the Earth Crust. The process of the folding and the formation of the fault of strata is being studied by Terada and the form of the cracks following the breaking of the crust by Fujihara. (6) Mathematical Investigations. Mathematical investigations into seismic waves and tsunamis were given by Senoo, among which the propagation of the Rayleigh waves on the surface and the inner strata.

that has been much interest to Tokyo society took place when Miss Caroline Maude Bulmer, the sister of Mr. Charles Bulmer, Kuroki popular Rugby player, became the bride of Sir Henry James Daniel Esaki, Kuroki's popular soccer player. The civil ceremony was performed at the British Consulate General at 10:00 a.m. and the religious ceremony, at which Rev. John C. Ford officiated,

OPENS SHOP HERE

had been killed by sharks. The case of the "Vestris" is of particular significance, inasmuch as it shows how a catastrophe develops where the rescue work has to be performed by the fishermen of the vessel. It is perhaps regrettable that the "Vestris" had no radio communication on board and went on her way without hearing the call. Added to that is the dreadful fact that, due to the heavy list of the ship, it was extremely difficult, if not impossible, to lower boats on the weather side of the disaster, and filled with water when smashed up. A temporary raft was made up of some of the boat's dunnage, and a few people were saved. Some of the boats appeared to be overturned, and filled with water when lowered. Only a small portion of the passengers could be placed in the sea, and the rest of the crew were only thrown through the side of the disaster, and after in some cases the boats, a raft and a few people were rescued. It is also certain that some of the survivors were rescued by the fishermen.

Of the "Titanic" disaster, the general history of which is known, it is perhaps worth mentioning a few details. The "Titanic," of 47,000 G.R. Tons, was built in Belfast, and was equipped with the most advanced system of life-saving equipment at the time. The ship was equipped with 16 lifeboats, of which 14 were of the collapsible type, and 2 were of the ordinary type. The ship was also equipped with a wireless telegraph system, which was in use at the time of the disaster. The ship was also equipped with a searchlight, which was used to illuminate the sea during the night.

BY PROF. LIENAU (Continued From Page 1) only be launched at great risk on the high side, which was also the weather side. The available boat capacity was sufficient to take every one off the ship. The sea was very rough, but not too rough to prevent boats being lowered properly if skillfully handled. In this position the ship sank deeper and deeper. Before one of the numerous ships that rushed to her aid had come to the aid, the captain of the "Vestris" was obliged to decide to abandon the sinking ship, which he did not do until 11 p.m., so that there were probably 8 hours in which to put out the boats. It is well to remember in this connection, however, that half of the time of the rescue was spent in the boats and the apparent lack of nautical training. Two of the first boats were lowered by the crew, and one of them was overturned. The other boats were lowered by the crew, and one of them was overturned. The other boats were lowered by the crew, and one of them was overturned.

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REV. HAQUET DIES AT HOSPITAL IN OMAHA

(Continued From Page 1) under the weight of his own old age had made him an invalid, he had on compiling notes and rearranging a second edition of his dictionary which is practically ready for publication.

After a thorough study of statistics of sea disasters and of seaman's reports, of which only a few can be presented here as examples, she can draw the following conclusions for the further development of life-saving at sea. Radio-telegraph should be installed even on small ships. Suitable equipment is to be developed. Maintenance of the buoyancy of ships for more than 25 percent of the total weight of the ship should be a large extent the chances of saving every life after an accident. This should be an object for extended and thorough research.

In view of the present "boat room for all" has so far never guaranteed the rescue of everyone on board, a sufficient amount of supplementary boat room, not less than 25 percent of the total weight of the ship, is demanded. This must be so arranged that it is possible to launch the boats from the side of the ship, and even by non-sailors. In cases where there is no outside help to be obtained, the disembarkation of the passengers is to be guaranteed when effected by life-boats properly manned by sailors, which then discharge the people to rafts, rather than with a large number of boats insufficiently manned. Thus, the boat to be aimed at is the concentration of the passengers in a few well-staffed rafts. This point is worthy of particular attention at sea.

WELCOME Delegates to the World Engineering Congress FUJI Ice Cream Parlor and Restaurant Regularly patronized by Foreign Residents In Tokyo Near Owaricho Crossing on the Ginza

HOTEL DE GAIRES PARIS 33, AVENUE GEORGE V NOW OPEN 150 BEDROOMS 100 BATHROOMS 5000 SEAT CATERING CHAUFFEURS LUXURIOUSLY Comfortable Agreeably Exclusive UNDER THE PERSONAL SUPERVISION OF M.F. SCHWENTER

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