

SEVENTY-SIXTH YEAR

SALEM, OREGON, SUNDAY MORNING, MARCH 13, 1927

PRICE FIVE CENTS

RADIO ENCYCLOPEDIA MAKES APPEARANCE

Book Makes Compact Review of All Done in Radio Field Up-to-date

The first encyclopedia of radio information ever published in America makes its appearance among the early publications of the new year, in S. Gernsback's Radio Encyclopedia.

From the nature of its material, this volume amounts to practically a compact review of all that has been done in radio up to this time. It presents a complete classification of the latest authoritative data on scientific discovery and experimentation in radio, and every direction of its application. The compiler has aimed to provide not merely a dictionary of radio terms, but an actual ready-reference encyclopedia and practical handbook for the most general all-around use. Its references cover every item of importance relating to radio or the radio industry. The text comprises 1,930 definitions of words, terms, and symbols which have a specific application in radio; concisely explained, and further elucidated with over 500 illustrations, diagrams and drawings.

All the most modern instruments, every known circuit, and every part and apparatus used in radio are fully described by word and picture. Detailed treatment is given also to such subjects as aerials, amplifiers, batteries, detectors, oscillation, radiation, switches, transformers, units, vacuum tubes, waves, etc. In addition, a supplementary cross index brings together correlated subjects and material in appropriate groupings.

Added interest and educational value is given through brief biographies of the outstanding personalities in electrical and radio science. Mr. Gernsback furnishes nearly 70 such short histories of discoverers and pathfinders, inventors and technicians whose work has brought radio to its present advanced development.

The book may be recommended for informational use to every radio listener, and should also be of great service to the radio engineer as a handy reference book. It can also be used profitably as a text book or reading guide by radio and electrical students, experimenters, wireless operators, radio salesmen—in short, by anyone engaged in work or study connected in any way with radio. Its definitions are in simple, every-day language, understandable to anyone who reads English. At the same time, they also meet the needs of

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REROUTING ROADS PROVES BIG NEED

Nearly 23,000,000 Motor Vehicles Make Use of Highways Today

By DuBoise Young, President Hupp Company

In the days of horse-drawn vehicles it was perfectly natural that roads should lead to the centers of cities and towns and villages. The purpose of the road was to make it easier "to get to town." "To get to town" meant getting to the centers of town.

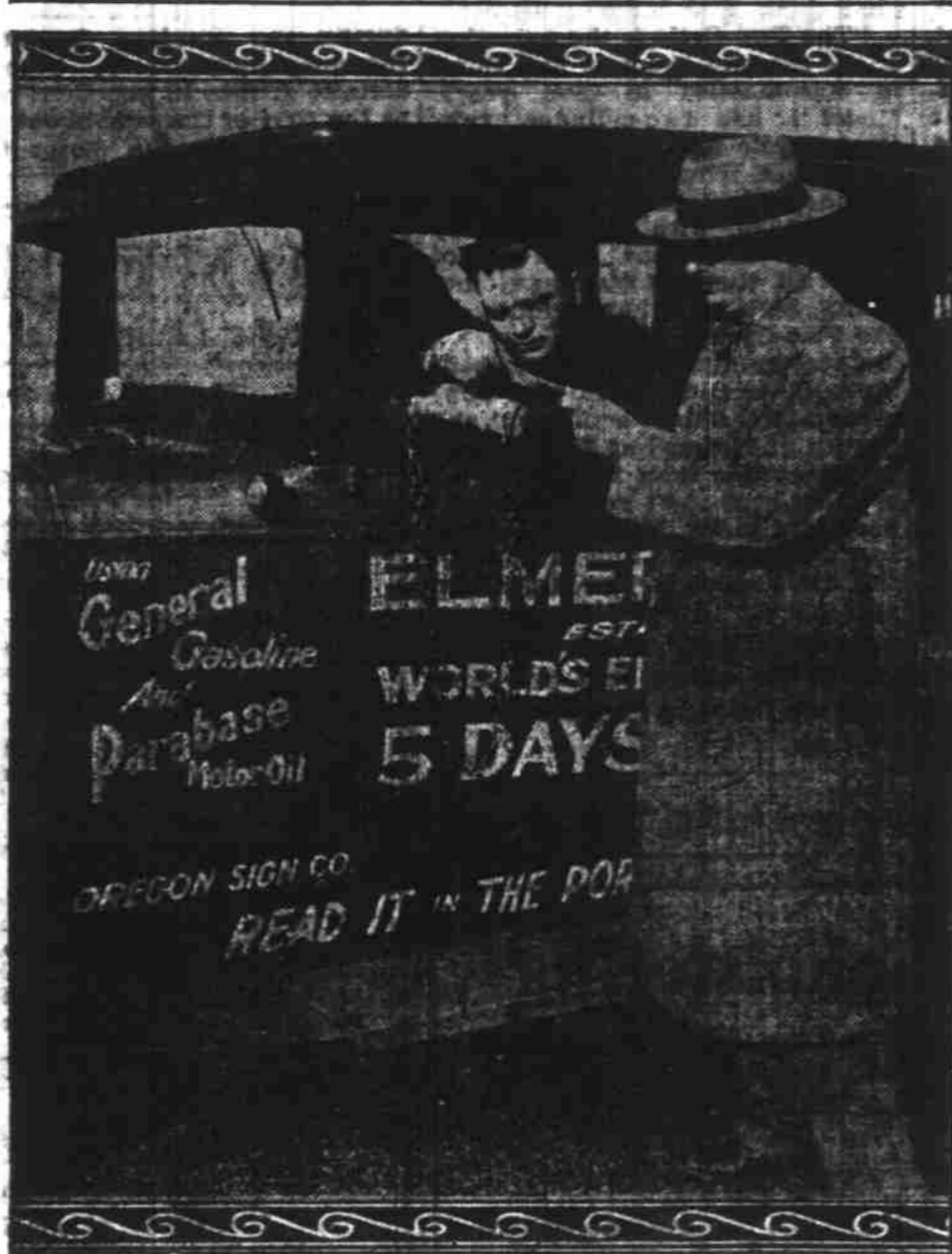
But today we have nearly 23,000,000 motor cars and trucks and buses to say nothing of horse-drawn vehicles, upon the streets and highways of this country. The day is coming when that number will be increased to 30,000,000 and possibly 35,000,000. And of course there should be highways leading to the centers of town but the time is coming when there will also be highways routed through the outskirts of town to take care of through traffic and such highways will relieve some of the congestion in the business sections of the cities.

Many a community today has congestion on its streets—at least during the summer months—for the simple reason that through traffic is compelled to pass through the center of the town.

We can expect some business men to oppose the highway on the outskirts of town on the ground that it will take away business traffic that would "cob" and from the town. The wise business man will have a place of business on the through traffic highway as well as in the center of town.

In the years to come we are going to see several changes in our ideas of highway building and rerouting of highways is one of them.

Makes A New Record



HERB is Elmer Steele, who recently established a new world's endurance driving record in Portland, Ore., when he drove continuously for one hundred and twenty-two hours. His automobile was fueled with General gasoline and lubricated with Parabase motor oil.

A new world's endurance driving record has been established. The feat was accomplished in Portland, Oregon, by Elmer Steele when, at the wheel of an Oakland "Six" sedan, he roamed around the city 122 continuous hours covering 1298 miles.

The car fueled with General gasoline and lubricated with Parabase motor oil. During his grueling drive, he used only 60 gallons of gasoline obtaining an average of 21.6 miles to the gallon.

This mileage is considered exceptional because the greater portion of his driving was done in the

down town district where traffic is unusually heavy.

Steele was chained to the steering wheel of the machine and the lock was not touched until he was released 122 hours later.

The driver paid high tribute to General Petroleum Corporation products. He reported that he used less than one quart of Parabase motor oil during the entire run and that at no time was the motor above normal driving temperature.

The result of the test was very satisfactory to officials of the oil company and the distributors of the Oakland automobile.

DODGE BROTHERS EXPORTS LARGER

All Previous Records in Sales of Passenger Cars and Trucks Passed

Dodge Brothers, Inc., surpassed all previous records in sales of passenger cars and trucks abroad last year with an increase in business of 14.9 per cent over 1925, according to figures just announced.

Foreign demand for Dodge Brothers and Graham Brothers vehicles has now reached such proportions that nearly one-eighth of the company's entire output of 331,764 cars and trucks in 1926 was shipped to buyers in all parts of the world. This increased demand has resulted in the extension of foreign dealers' activities into every country of the civilized world.

Dodge Brothers gain in export shipments is especially noteworthy when compared with the accomplishment of the industry as a whole last year. Preliminary estimates of the National Automobile chamber of commerce for 1926 show that 350,000 motor vehicles were exported from the United States. This is a gain of 3 per cent over 1925. Dodge Brothers passenger cars and Graham Brothers trucks totaling 39,016, which is a gain of 14.9 per cent over the preceding twelve month period.

Exports of cars and trucks, ex-

(Continued on page 8.)

Complete Line of Parts Handled; Ring Popular

W. E. Burns—Dan Burns (Not Brothers—the Same Man) handles a complete line of parts and accessories for automobiles. He has made it the policy of the store to handle only the very best obtainable and so is continually working to that end, thus giving better service to those who patronize his store.

Mr. Burns spent two days in Portland recently in the interests of the Pedric ring. He sells this ring throughout the state. It is understood that the ring gives unusual mileage in as much as it is heat-treated and shaped by a special process.

BIG YEAR LOOMS FOR AUTO RACING

Captain Eddie Rickenbacker Forecasts Much Improvement on Tracks

WASHINGTON, D. C.—Unparalleled development in every phase of automobile racing during 1927 is predicted by Captain "Eddie" Rickenbacker, chairman of the contest board of the American Automobile association, a World war ace and formerly nationally known racing driver.

Captain Rickenbacker's forecast was based on what the contest board, which supervises and regulates official racing throughout America, has already done to assure the most successful years in the history of the roaring road. Among the developments to which he called attention in connection with this year's racing were the following:

First, the entrance of the contest board into the Sportive Commission Internationale, worldwide arbiter of automobile racing.

Second, the advent of new makes of automobiles into the American schedule for 1927.

Third, the decision of the Society of Automotive Engineers to watch racing cars with the utmost care that the improvements their engineer may be used eventually to improve the stock cars of the nation.

Fourth, a campaign to obtain the conduct, under the official eye of the contest board, of tests and experiments involving stamina, time, economy and distance by companies desiring to advance their claims in advertising, so that the public may be assured of the perfect truth of these claims.

"With all this brewing," Captain Rickenbacker said, "it seems inevitable that public interest such as racing has never known is to grace the season of 1927. The affiliation with the Commission Internationale alone is a great factor, one of the important developments of the last several years. It is through this body that claims of world records are established and recorded. Because America was not represented her claims have been denied world recognition, although repeatedly the races have been the fastest ever run. The new affiliation will remedy this situation. The first result has been the dispatch of the great English car, "The Sunbeam," to this country bent on setting a new record under our perfect conditions. Any record now made in this country would be accepted throughout the world.

"New cars in the offing are of far reaching significance. Harry A. Miller who has had a strangle hold on the building of specialized race cars, is now completing the last two racers he may ever build, front-drive speedsters of the 91 1/2 inch engine type, one for Harry Hartz, the 1926 champion, and one for Peter De Paolo, the 1925 champion. But one of the biggest automobile companies of Detroit, whose identity I am not yet at liberty to reveal, is building three cars with the greatest secrecy, of the year."

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TESTS SHOW GREAT ACTIVITY OF KNIGHT

Efficiency of Four Wheel Brakes Developed to Greater Extent

Final tests on the Falcon-Knight, the new six-cylindered Knight motored car, which will shortly be presented in the \$1000 price class have developed performance facts which indicate that this car will fully bear out the records for ability which have become associated with Knight motor performance.

Working to give this car the desired acceleration in traffic, the engineers have developed a power plant which will bring the sedan from 5 miles an hour to 25 miles an hour in 8 seconds.

The efficiency of the four-wheel brakes has been developed to a point where this rapid acceleration is safe for the driver because of the rapid rate at which the car may be stopped from any speed at which it may be traveling.

Easy turning in traffic has been secured through a design which gives a turning radius of 40 feet permitting the car to be turned in the narrow streets found in the residential sections of the average city.

Power development reaches its maximum in the motor at 3,000 rpms, when the developed energy is 45 brake horsepower. The power built up at the lower motor speeds is rapid and at the average driving speed of 35 miles an hour on high gear the motor is turning over at slightly less than 1,600 rpms.

The power developed per cubic inch of piston displacement is, in common with other Knight sleeve-valve motors, greater than that developed in any other type of motor of the same displacement.

Engineers give as the reason for this power efficiency, the absence of pockets in the cylinder dome.

Developed energy has also been increased by the compression ratio of this motor, which is approximately 25 per cent greater than that of the average six-cylinder motor of equivalent size, but differing in its mechanical design, according to the same statement.

The result of the power development, the build up in power as the motor increases its speed, and the high compression ratio has resulted in a range of performance in high gear which the makers claim is entirely new in the light six field.

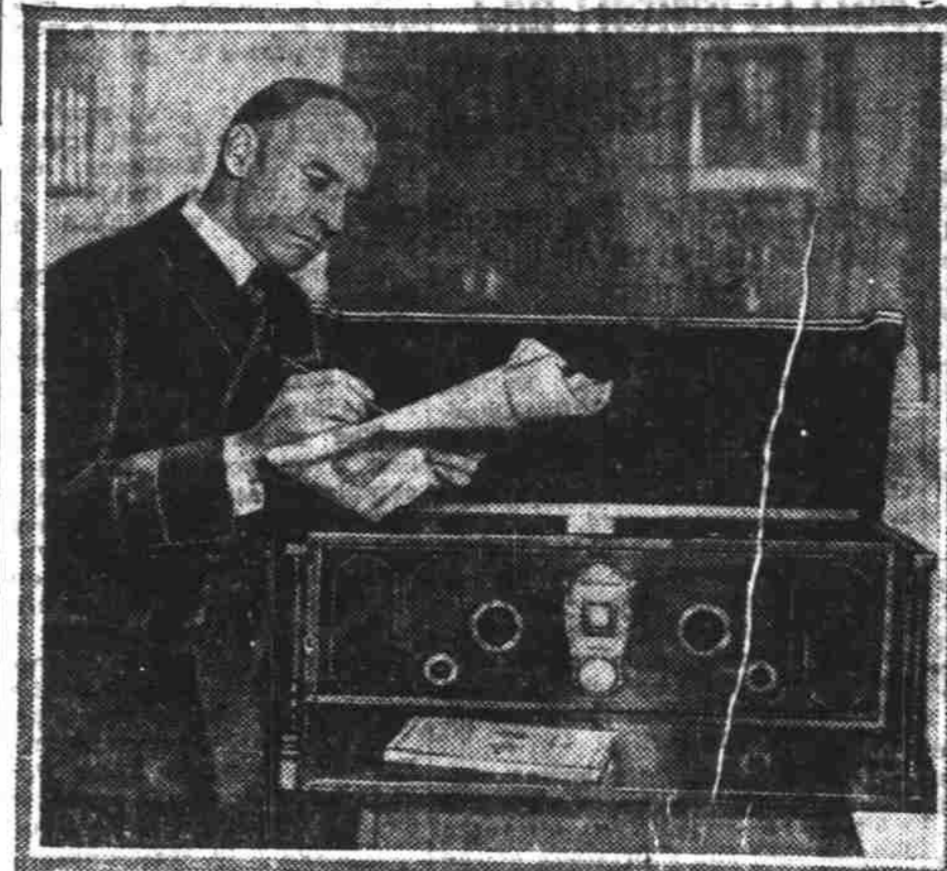
It is well known that Knight motored sixes have shown high speed ability and that they have accomplished noteworthy records in hill climbing because of the ability of the Knight sleeve-valve motor to sustain its power under heavy load.

In the construction of the motor for the Falcon-Knight the engineers have utilized all past experimental and development work to further the efficiency of this power plant.

"Traffic requirements are forcing motor car manufacturers to

(Continued on page 4.)

S. S. Leviathan's Captain Listens In



Commander Hartley Has Own Set in His Private Quarters

In spite of the fact that the steamship Leviathan, the greatest in the world, is equipped with radio for all purposes, Commander Herbert Hartley, best known of all transatlantic skippers, has his own private set installed in his palatial cabin. With this Freeden-Eisemann equipment he keeps in touch with what is being broadcast ashore and this helps him to relax from the great strain of handling the ship.

"For the first three days of each voyage out of New York," he writes to Alex Eisemann, "I get all that is going on in the United States. Then during the last three days of the voyage I get everything that is being sent out from England and the Continent.

I am never out of touch with the shore and it has been wonderful to hear the voices of some of my friends when they have been broadcasting. I find your radio the greatest comfort after hours and hours on the bridge and it gives me just the relaxation that I need to keep fit and on the job."

Commander Hartley's responsibilities in safeguarding the Leviathan are greater than those of any other captain in the world. He is in charge of thousands of lives and on most voyages these include men and women famous for their work as well as wealth. His crew alone consists of more than a thousand souls and the value of the ship and her cargo runs into scores of millions of dollars.

Concerning Whiskers: Star Would Organize New Club

George Barrere, eminent flute virtuoso and conductor of the Little Symphony orchestra at WABC Monday night, March 14, at 9 o'clock, wears beneath his whiskers a delightful sense of humor.

"I know my whiskers are a shining mark for the jokesters," says the WABC star, "but I do not feel worried when I stop and think of the good men and great who have sought refuge behind whiskers so they would not be compelled to meet the world face to face. Brahms wore whiskers, so did Abraham Lincoln, Beeman, the chewing gum magnate, had them a plenty, so did Saint-Saens and the Smith Brothers. Brigham Young had lovely foliage and so did Verdi. Every singer at the Metropolitan Opera House in New York stands in awe of the whiskers of Gullio Gatti-Casazza. Wearing whiskers will save any man time, trouble and money—a trinity worth of thinking about. There is a baldheaded club which gathers much nation wide publicity. Why not a whiskers club. I intend to compose and broadcast a "Whiskers Symphony" and then I'll go on the air and ask for converts and in few weeks we will have a club which will strike terror to the heart of King Gillette."

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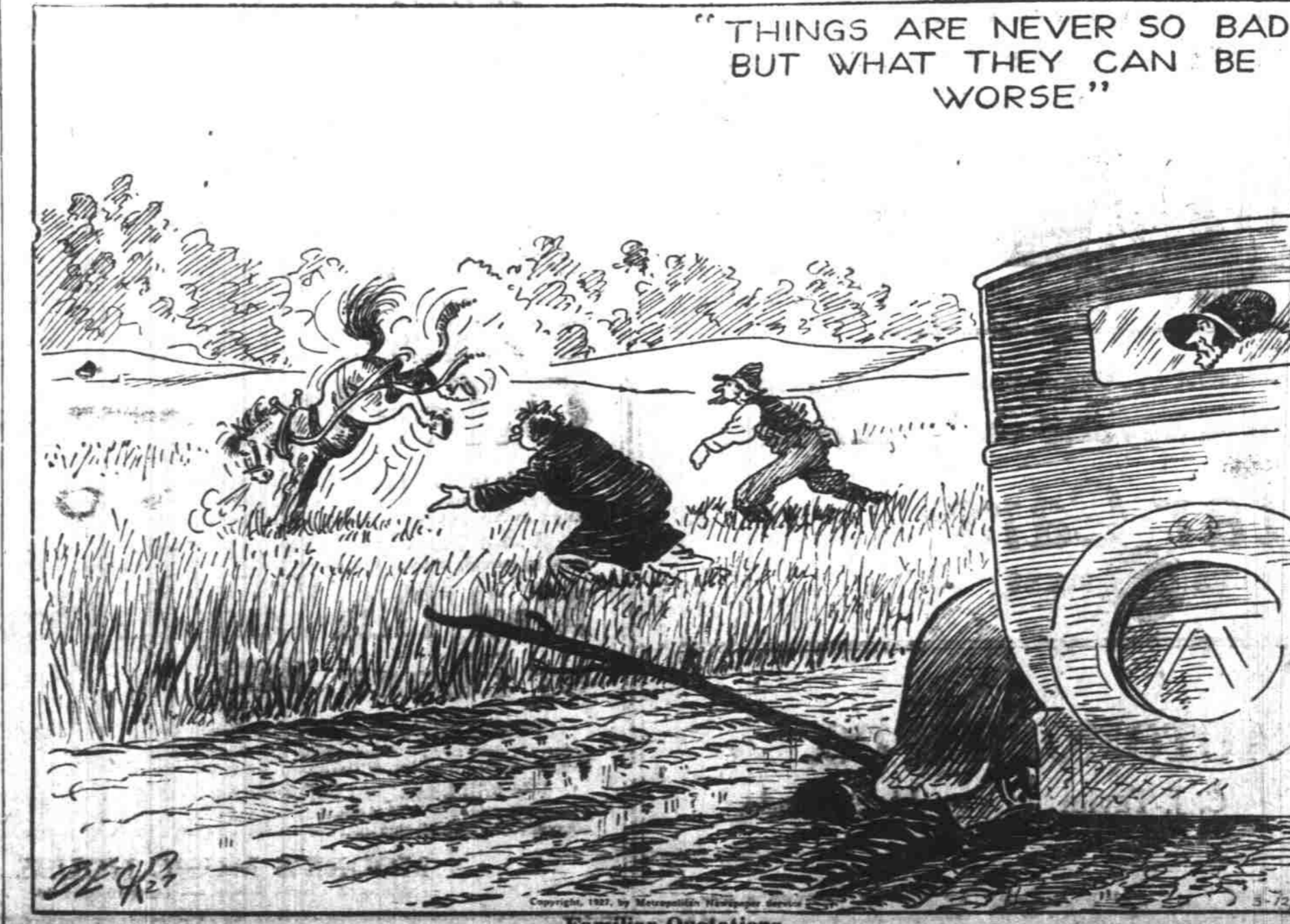
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"Traffic requirements are forcing motor car manufacturers to

By FRANK BECK

DOWN THE ROAD



Familiar Quotations

STAR ANNOUNCES NEW LINE MODELS

Noteworthy Mechanical Improvements, More Comfort, Attractiveness

The Pacific Coast Star car factory today announces an entirely new line of models for the coming season.

This announcement heralds many noteworthy mechanical improvements and introduces to the motor car buyer a Star car of greater attractiveness and comfort. Beauty characterizes all models of the new Star line, and it is already assured that these 1927 offerings will strengthen the claim of the Star product to leadership in the low cost transportation field.

Most important among the mechanical developments is the announcement of a rubber motor suspension on the new Star four cylinder models. This type of suspension has been accepted by the world's greatest automotive engineers and adopted by many manufacturers of motor cars in the higher price class. But the Star car is the first popular priced automobile to offer the superior advantage of this modern development.

In presenting this "New Silent Star Four," Star car engineers are again pioneering in the low Lumberman, Chicago, says:

The motor in the new Star four is suspended entirely on rubber. The power is transmitted through the latest improved Spicer Rubber universal joints. As a result of this modern engineering, the new Star four presents a smoothness of operation never before attained in any four cylinder automobile.

Mechanically, this construction consists of a rear cross member directly bolted to the motor crank case and supported at its outer ends in brackets riveted to the frame. These brackets contain a special rubber filler block which entirely surrounds the ends of the rear motor cross member and prevents any metal-to-metal contact. The front end of the motor has extensions on either side of the chain case, which fit into brackets bolted on a cross member and are similarly hung in rubber. This mounting does away with any metal-to-metal contact between the motor and the chassis. Therefore all vibrations which may be set up in the motor are absorbed by the rubber block insulators. This elimination of vibration makes the new Star four as smooth as a six cylinder car.

Among the mechanical improvements on the Star six, adoption of

(Continued on page 3.)

PAIGE MAINTAINS REMARKABLE PACE

Year-End Handicaps Overcome and Prospects Found to Be Bright

DETROIT, Mich.—(Special).—In submitting to the stockholders the annual report of the Paige-Detroit Motor Car Company for 1926, H. M. Jewett, chairman of the board emphasizes the fact that the company's financial position was well maintained from outside causes, during the second half of the year.

Sales of cars and parts in the year amounted to \$36,833,479 the company having produced and sold 57,905 cars.

In his letter to the stockholders Mr. Jewett says: "On September 30, 1926, debentures amounting to \$1,000,000 were outstanding; \$500,000 of these were paid December 1, 1926. Of the \$500,000 still outstanding, the company has purchased and holds \$252,000.

"In accordance with sinking fund requirements we retired during the year preferred stock of a par value of \$247,800.

"Current liabilities were reduced during the last quarter by nearly \$800,000.

"The ratio of current assets to current liabilities is in excess of 2-3-10 to 1, and of total liabilities over 4 to 1.

"Net earnings, after provision for depreciation, federal income tax, and all other charges, and after elimination of inter-company profits, amounted to \$500,206.56."

The larger part of the sales were made in the first six months, which exceeded all previous records of the company. In the second half of the year the company's production and profits were seriously cut by the delays and expenses incident to a complete change of body models and establishing a new source of body supply.

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Lebengood Garage Ready to Give Best of Service

The C. W. Lebengood Garage, which was formerly located at Miller and Commercial streets, recently. The new home is a fire proof building, which has just been constructed.

The garage is equipped to give all kinds of service to its patrons. Complete equipment is on hand, which makes possible quick and efficient auto repairing. A complete line of accessories is handled by this garage.

FAIRWAY TO CLOSE DURING FINAL WORK

Engineering Feat of Lifting North Span to Be Carefully Undertaken

CROCKETT.—(Special).—As a precautionary measure during the delicate and dangerous task of raising the first of the two suspension spans to place on the Carquinez Bridge, the world's largest highway bridge, the United States government has ordered the North fairway closed to traffic between now and March 10th. During this period the North suspension span will be swung into place on the noble structure which spans Carquinez Straits between this Contra Costa town and Vallejo.

Major John W. N. Schultz, district engineer, in charge of the U. S. Engineer Office, headquarters, San Francisco, in his notice to mariners says: "The closure of the north side of the strait is necessary in order to permit the performance of certain operations in connection with the construction of the Carquinez Bridge.

"Navigators will use the South fairway between the center pier and the South shore when passing under the bridge during the closure dates, and are hereby cautioned to proceed at an extremely slow rate of speed, when in the vicinity of the bridge, so that the hazardous operation of lifting the North suspension span of the bridge will not be endangered by wave action or otherwise."

The exact hour and date of this engineering feat depends entirely upon weather conditions, rain, fog, wind, or wave action might turn the task into a disaster. For that reason every precaution is being taken and daily weather observations are being made by a special bureau directed from the Mare Island Naval Yard Observatory.