

CHALLENGER ESSEX HANGS UP RECORDS

Amazing Speed of 66 Miles
Made on Difficult
Dirt Course

* Sharing in the glory of an Essex the Challenger stock sedan which hung up an amazing record when it was driven continuously for 18 hours at an average speed of 66.86 miles per hour over a difficult dirt course. Vedol Motor oil proved once more its reliability and efficiency under the most grueling of conditions.

The course which the car traveled was a measured five mile oval, level and unbanked, in Muroc Dry Lake in the midst of the California Mojave desert. The running distance of 1,203 miles was covered partly in broiling sun and partly in a wind which at times mounted to a veritable gale.

"The run was made with the intention of breaking the only known authentic speed record ever made by a stock sedan listing under \$1000 on a 1900 mile course," says Paul J. Feely, who conducted the run. "The Essex, Vedol lubricated, came through with mileage and speed records which surpassed the old records of 60 miles per hour for exactly 1000 miles by a margin that has set motordom agog."

"No car in the same price class as Essex, as far as it is known, has ever been able to maintain anywhere near the speed of 66.86 miles per hour," continued Feely. "The most reliable and efficient lubrication being vital in protecting the speeding motor from overheating, Vedol motor oil was selected."

TURNOVER LARGE AT ENGLEWOOD SCHOOL

A 54.7 per cent turnover in the student body of Englewood school was made for the year just closed, according to the annual report of Principal Lyle Murray just submitted to the city superintendent. Just 363 pupils were enrolled, of whom 132 were new and 66 dropped.

Twenty children made perfect attendance records and but five failed to pass the posture tests, with 101 on the honor roll, the year's review shows. Students purchased with paper drive funds a projectoscope; they also donated \$20 to the community park for swings. Six "weeks" were observed by the pupils; and several projects, including a major one in forestry, were carried to successful conclusions. Miss Madeline Heckman and the third grade pupils sponsored and presented a play, proceeds from which were used for the park swings and equipment.

Richfield Gas Helps Make Mark



When B. Kataoka with a fast bi-plane won the Imperial Coronation air races in Japan recently his plane was powered with American-made Richfield gasoline, according to news from Japan. Top photo shows, left to right, the winners of the event—B. Kataoka, Y. Kokoyama, Y. Takemura, Y. Baba and S. Torii. The Japanese lettering in upper right is from the official program and is translated—"Richfield Gasoline of Power." Richfield gasoline, formerly distributed almost exclusively on the Pacific Coast, has now become national and international, with distribution in the Orient, Antipodes, Canada, and the eastern part of the United States.

Dyer Ranks High As Saleman Of Much Insurance

W. C. Dyer, of the office of Hawkins and Roberts, was the eighth best seller in a field of 1500 insurance writers for the month of April, according to report just received from the home office of the Missouri State Insurance company which he represents. In other words, Dyer placed eighth in the list of individual sales for the entire country. He has been in the business for 18 years. He will leave here June 14 for St. Louis, home office of the company, to attend a national meeting as a guest of the company for his salesmanship record.

Oregon Net Men Are Eliminated In Texas Meet

SAN ANTONIO, Tex., June 7—(AP)—Bruce Barnes, University of Texas, eliminated Bradshaw Harrison, University of Oregon, in one of the Texas state open tournament big tennis upsets today in three straight sets, 6-3, 6-4, 6-3. Before the match Harrison was a heavy favorite to beat Barnes. The Oregon doubles team composed of Harrison and Captain Serman Lockwood was eliminated by Berkeley Bell of the University of Texas and White in a four-set match, 6-3, 6-4, 2-6, 6-0.

ACCESSORIES? YOU BET!

Dealer Supplies Young Engineer's Needs

\$677 PUT ON ONE CAR

Automobile owners who believe that new cars are coming through so completely equipped that there is nothing left in the way of accessories to buy for them, would have been surprised had they seen a new model car in the popular price class which was recently equipped with accessories by the Western Auto Supply company.

"A young mining engineer from South America came into one of our stores recently and asked a salesman to help him select equipment for his car that would add to his safety and comfort on a cross country trip," says Mr. Clarke, local Western Auto manager. "The matter item was selected for the new car and before the sale was completed a total of \$577.00 worth of accessories were installed on the car."

"Equipment for the car included: Aurora Radiator ornament, 2 fender mirrors, sport trunk and trunk rack, oil gauge, Broadway bumpers, 2 fender wells, Zapon paint and brush, carburetor, ash receiver, Waltham clock, 4 Polson Puncture sealing inner tubes, 1 Western Giant tire, 1 wire wheel, locking gas tank cap, radiator cap, aeroplane radiator ornament, tire cover, ventilator glass, accelerator rest, starter extension, steering wheel grip, Wedford cushion, certificate holder, 4 Pro-tex-a-car, 2 license frames, 2 booster plates, 2 tire locks, 2 hub caps, 2 chrome

PUMPING TO AID IRRIGATION HERE

(Continued from Page 15.)

thoroughly perforated before driving and the lower end should be plugged with a short piece of perforated casing dropped to the bottom of the well after hammering the piece together to form a point at the lower end. Such wells can usually be drilled by alternately using a churn drill and sand bucket. Where only a fair yield is obtained, two such wells in different corners of the pit may be installed and connected to the pump by means of a double suction pipe. This should lessen the amount of draw-down or lowering of the water plane when pumping. The suction lift with centrifugal pumps should be as small as possible and should not exceed 10 or 12 feet at the most. The pump will therefore need to be placed close to the water table.

The Stove Pipe Type
Where there is considerable fluctuation in the water table, it would seem desirable to install a stove pipe type of well. Such wells are ordinarily made 12 to 24 inches in diameter and lined with 10 to 12 gage casing which is inserted in small lengths and riveted together at the joints as the digging proceeds. Hollow tools are used in digging such wells. Sometimes lighter gage casing is employed and put in so as to break joints and provide two thicknesses of the material. This type of well requires a deep well turbine pump and can be used where there is considerable fluctuation in the height of the water table.

A careful log of the strata encountered in digging the well should be kept and the stove pipe casing can then be slitted, so as to thoroughly perforate it through out any water bearing strata. Where a water bearing stratum carries considerable quick-sand or other fine material, a patent well

strainer may be required of sufficient area to admit the water without excessive velocity. Patent strainers are of amalgam or composition metal that will not corrode, and the openings are made in a metal screen gauge or slotted screen cut from the inside so that sand grains starting through will not lodge in the openings in the screen. The area of strainer openings should be at least 12 times the area of the diameter of the suction pipe, and twice this ratio would be desirable either with the strainer or perforated well casing. A strainer or perforated casing may be placed in the center of a large well in sand, and the surrounding it lined with gravel.

The Best Pump
The horizontal centrifugal pump is most suitable for handling large quantities of water at moderate lifts where there is but little fluctuation in the water table. The centrifugal pump with a horizontal shaft can be mounted or supported better than the vertical shaft type. High grade centrifugal pumps are constructed with split casings to facilitate cleaning and with double suction to reduce friction and to balance the force of the water. Bearings are largely water cooled.

Suction and discharge pipes must be air tight, and to reduce friction would be 35 to 50 per cent greater in diameter than the pump. Few turns should be used, and those necessary should be of large radius. Pipes should be mounted to avoid undue strain on the pump. A check valve should be placed above the pump in the discharge pipe to close the discharge pipe for producing a vacuum for priming. A globe valve placed between the pitcher pump and the pump casing will be used to close this priming line air tight when the pump is in operation.

The pump should be set on a foundation sufficiently heavy to hold it against belt strain, weight of pipes, and vibration. Threaded anchor bolts should be set in the concrete foundation and held in place with a wooden template at the proper location to receive the

pump. Nuts are run down on these bolts to a level plane as determined with a carpenter's level, after the concrete of the foundation has set. Rich cement is then poured around these nuts to hold them on a level plane, on which the pump is bolted down.

The Best Power
Electric power is most satisfactory where it can be obtained, although a Diesel engine offers a fairly economical source of power for those not situated near power lines. In calculating the power required, a horse power will lift a cubic foot of water eight and a third feet per second and is called a water horse power. If the lift, including friction head, were 25 feet, three theoretical horse power would be required to deliver a cubic foot per second. Since pumping plant efficiency may not be more than 50 per cent, twice the actual power required to perform the work should be provided. Moreover, it is desirable to have a little extra power, since the draw down in the dry season may become greater in certain years or with general pumping in the neighborhood.

Efficient Design Needed
Few small pumping plants in the valley have been installed so as to give the highest possible efficiency. Piping should be arranged to reduce friction to a minimum and to discharge the water at the lowest practicable elevation. It is poor economy to have a plant so small that the irrigating stream will not cover the land to be watered in a reasonable time. Where cheap storage can be provided, a lower first cost per acre can be realized. Shelter and good care of pumping machinery is necessary to maintain its efficiency.

Careful use of pumped water is necessary if the greatest profits are to be realized. Excessive use of water may injure the quality of soil and result in failure even in arid climates. Water should be carefully measured and skillfully applied to land that has been leveled to a uniform slope and with laterals as nearly water tight as practicable. Frequently it will be

desirable to use under ground concrete, wood, or metal pipes for laterals for the distribution of pumped water. To distribute water from hydrants along the pipe line, portable canvas hose or light alloy joint metal pipe may be used. The latter is preferable. Small furrows or corrugations for distributing water on a field may be necessary where the stream used is small. Furrows may be three to four feet apart and 220 to 440 feet long, being shorter on sandy soils. Cultivation should be given as soon after irrigation as the soil is dry enough to crumble to form a mulch; to prevent baking and to kill weed seedlings that may be started by the irrigation. Oregon Experiment Station Bulletin No. 235 entitled, "The Economic Limit of Pumping for Irrigation," reporting 20 years studies of supplemental irrigation can be secured from the experiment station upon request.

PATTERSON BACK
Governor Patterson returned here Friday from La Grande, where he participated in the program attending the dedication of the new state normal school. He also attended the Eastern Oregon Livestock show at Union.

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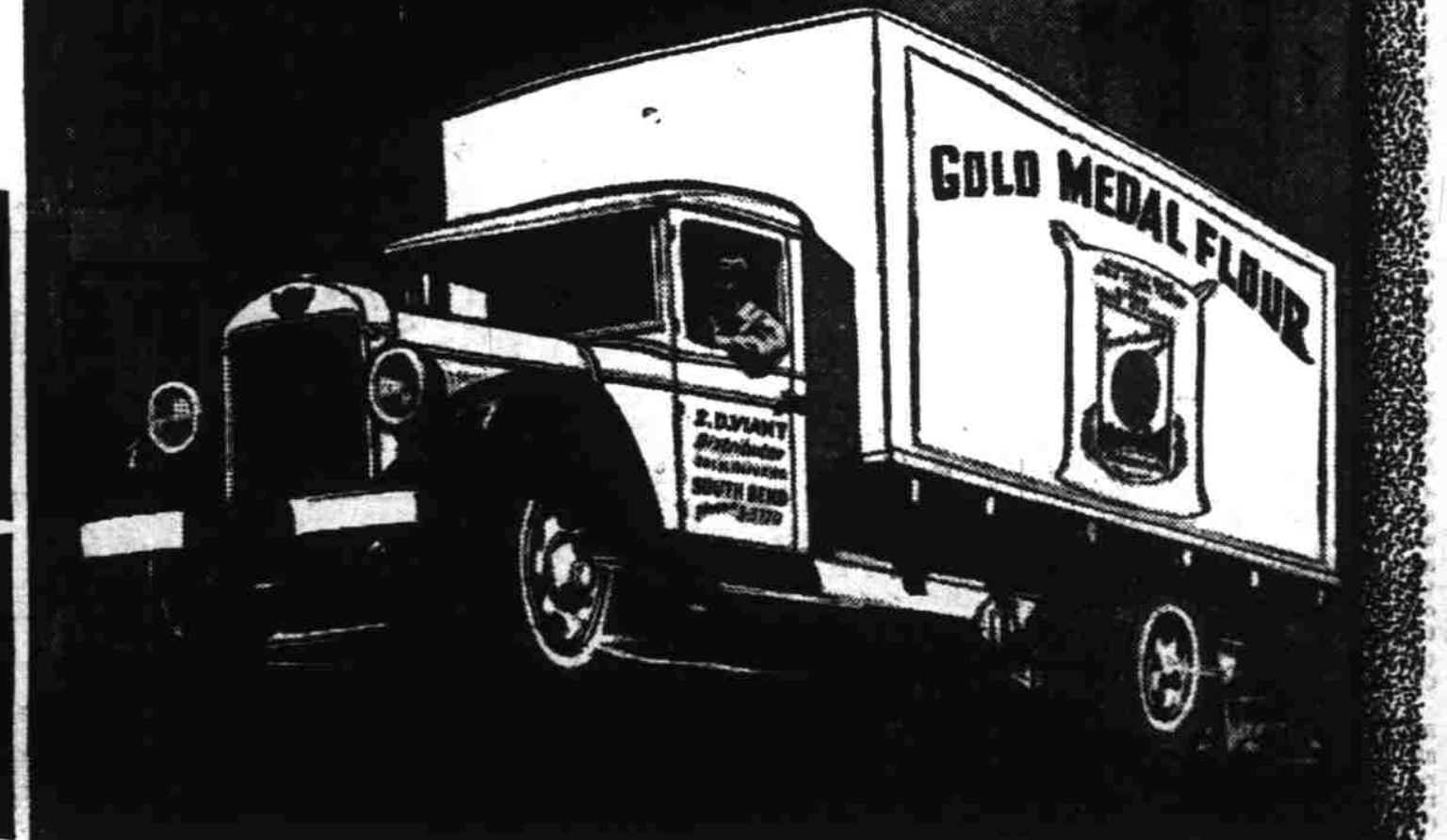
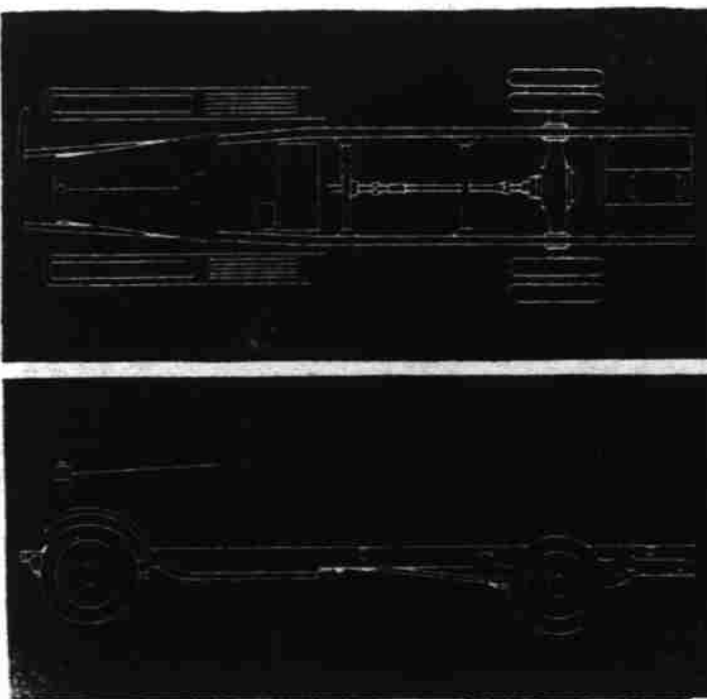
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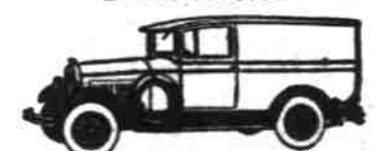
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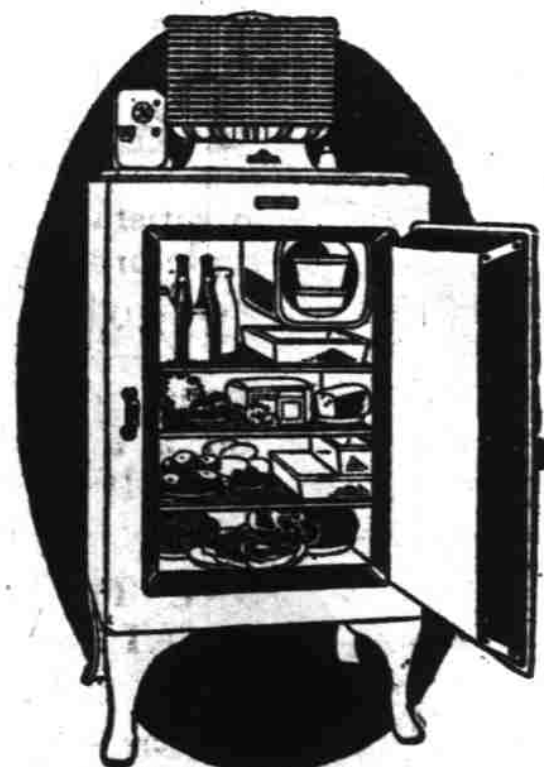
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