

Expert Advice For the Automobile Owner

Queries and Replies Covering Matters of Importance to the Man Who Runs a Car

My rear axle makes a noise, especially when turning a corner. I have had new housing and gears put in, also new bevel gear driving pinion. When I screw the pinion as tight as I think it ought to go it binds. What is the matter?

This condition is due to the shifting of the large differential gear, so that it moves away from and toward the driving pinion. The cause of this is usually a loose truss rod, which permits the housing halves to separate. The left half of the housing should be removed and the bolts reset and tightened, and then the truss rod taken up as far as possible to form a rigid construction. If you are not familiar with the work do not attempt it and under no circumstances should you try to readjust the gears to compensate for the loose rod.

Are chain carbon removers as good as the scraping method?

Much has been said against this method of removing carbon from the cylinders, but it has been tried with very satisfactory results, no harmful effect on the motor being noticeable. It certainly is a quick and effective method and equal in every way to the result obtained when the cylinders are removed and scraped. Many people are afraid that if they use this method there is danger of the chain catching in the valves or that small pieces of the chain will become broken off and score the cylinders. Both experience and careful thought on the subject, however, will show that there is no possibility of the chain catching in the valves of any poppet valve motor. Of course it would not do to use the chain in a rotary or sleeve valve motor, because it would get caught between the edge of the valve and the edge of the ports and be ground to pieces, and at the same time the valve would be injured. Furthermore, there is no possibility of small pieces of chain breaking off and scoring the cylinders for the reason that the chain is not brittle. It will bend before it will break. Nor is the material hard enough for the remover to scratch the cylinder as it is battered about. The chain will only remove the carbon from the top of the piston, the cylinder head and that part of the bore that is above the piston travel. The valve pockets must be scraped, but as these are easily accessible this is not an objection.

How are platinum points fastened to screws of a magnet?

One method is to hard solder the points in place. The first step is to cut two small slots at right angles in the end of the two members carrying the points. Then by the aid of the brass solder the points are fastened in place.

Kindly tell me something about long and short intake manifolds. Which is the better?

The short manifold usually is better, showing superior results at low speeds with wide open throttle and equally good results at high speeds. When the throttle is wide open at low speeds, a condition existing when the car is on a heavy pull, the liquid gasoline in the manifold must be lifted a greater height in the long manifold, and hence there is a chance of loading up, due to the liquid fuel dropping back against the throttle. The condition really is caused by the air velocity being insufficient to carry the fuel to the motor. With a short manifold the fuel need not be lifted very high, and hence there will be no loading up or collecting of gasoline in the manifold.

What is the life of the average storage battery when used for starting?

A starting and lighting battery will last for three to four years, if properly cared for. Each year the battery will need new separators.

How can I change a low compression motor to a high compression one?

The compression may be raised by several methods. It is hardly advisable to make this change, because your motor has been designed for a certain compression, and if you raise it, say ten pounds, you will submit the cylinders to a greater strain than they were designed for, the pressures on the cylinder walls will be greater and the wear on the bearings more. If your motor is not giving sufficient power you should find out what is the matter with it rather than raise the compression.

Probably the best method is to rivet a plate to the top of the piston or the cylinder, whichever is more convenient. Placing the plate on the piston adds weight to the reciprocating masses, while if it is attached to the cylinder head there is danger of interference with the flow of the gases in and out. In either case be sure that there is clearance enough between the piston and the cylinder to allow the plate to be put into place. If the plate is attached to the piston it should be made of aluminum for the sake of lightness.

Lengthening the connecting rods or increasing the crankshaft throws will also increase the compression. But neither of these methods is as simple or as cheap as the first one suggested.

What is the approximate saving in current when using the two headlights switched on as dimmers instead of switched on full?

This all depends on the method of dimming used. If the lamps are dimmed by connecting them in series then the current consumption is cut in half if the resistance in the wires is neglected, and since this is small it may be. If two bulbs are used in the headlight, a large one in focus for country driving and a small one out of focus for city driving, the saving may be much greater, the small bulb taking about a fourth the current of the large one.

I am troubled with fire coming from the exhaust cut out underneath my car when running rapidly and shutting off quickly; also when pulling hard. It is not the regular exhaust from the engine, but a large blaze like gasoline fire which comes clear to the ground and spreads out several feet each way. Can you explain it?

It is difficult to say exactly what is causing this trouble without seeing the car. However, it may be that the valves are improperly timed or the mixture may not be correct. If the valves have been reset lately it would be wise to make certain that the timing is correct, but if they have not been reset they probably are all right. If the mixture is at fault it is a simple matter to adjust the carburetor. Possibly there is carbon in the exhaust pipe or it may be that you are running with the spark too late.

My front axle is bent about one and one-half inches from the spring seat to the outer end of the axle, a distance of about ten inches. How should it be straightened?

This axle should be heated to a cherry red heat and then straightened. The heat should be applied at the bend only, and as this is ten inches from the king pin bushings there is no reason why the latter should be heated and therefore no danger of them becoming enlarged. In fact, it is doubtful whether they would be enlarged even if exposed directly to the heat. It is not necessary to give the axle any heat treatment after it is straightened.

Does it make any difference how many teeth are in a bevel gear in relation to the gear it works in?

The relation of the number of teeth on the driving pinion to the number on the large gear gives the ratio between the number of revolutions the motor makes as compared with the number the wheels make when the car is traveling on high gear. Any change in either the pinion or bevel gear alters the ratio.

What is the cause of inner tubes becoming cemented or fastened to the casing so it is very difficult to remove them?

This is caused by neglecting to use enough tire talc between tube and casing. Whenever a tube is placed into a casing always sprinkle talc over the inside of the tire. Talc is a white powder, which is cheap, and may be bought at any supply store.

How do you fit babbitt bearings on crank shaft and connecting rods, either when putting in new ones or when taking up slack in old ones?

If only slightly worn bearings may be adjusted by removing shims or by filing the bearing caps. If the bearings are scored or worn out of round or if new bearings are put in the surfaces must be scraped.

If the bearing surfaces are in good condition and not worn out of shape a slight adjustment should be sufficient to make them tight. There are usually several shims under the bearing cap, and by removing these one by one the looseness will disappear. Remove only enough shims to make the bearing a snug but not a tight fit. When shims are not used the lost motion may be removed by placing the bearing cap in a vise and filing down the surface. In case too much material is removed a copper or paper shim or shims should be inserted to make the cap fit. In filing the flat surface of the bearing cap should be preserved, the file not only being held flat against the surface, but the movement of the tool being carefully executed.

If the bearing is scored, new or worn out of round it will need scraping. This should be done by an experienced man. Connecting rod bearings may be scraped without tearing down the motor, but if the main bearings require scraping the motor must be disassembled and the crank case placed upside down with the crank shaft and fly wheel still in position. The main bearing caps are removed, and the crank shaft bearing surfaces are painted with a solution of Prussian blue. After rotating the crank shaft a few times and removing it the high spots of the bearings will be coated with the blue. These spots are carefully removed with a special scraping tool, care being taken not to cut too deep. Then the crank shaft is repainted and the operation repeated until the few large high spots have been placed to more evenly distributed small ones, showing that the bearing makes contact at practically every point.

P. E. O. Convention Next Year

Alliance has been selected for the state P. E. O. convention in 1916.

ADJUDGED INSANE

Man Named Dan Dorrell, Home Any Place, Picked Up by Officers Last Friday

A lady living in the east part of town was amused and then startled last Friday when a stranger appeared at her home in the afternoon and begged for a spool of thread, not caring what the size or color might be. Imagine her surprise when the man took the thread and started over to a neighbor's house, wrapping the thread around trees, shrubbery, and then around the neighbor's residence. When he had used the entire spool, he proceeded to ask the next neighbor for a new supply, and then started through the same procedure. But the officers had been notified and before the man could complete his operations, the nature of which was evidently to bind the houses on one street together so that they could not be blown or washed away, the law was upon him and he was escorted to the police station.

When questioned he gave his name as Dan Dorrell, with no home in particular, and it was at once seen that he was insane, as his words were confused and his mind wandered intermittently. On his person were found two letters, one of which was addressed to Mr. Captain McCullough, care Capt. Snyder, Broadway Transfer Co., St. Louis, Mo.; the other letter contained no address. Following is an excerpt from the latter letter and it gives an idea as to the befuddled condition of his mind:

"The novelists and story writers tell of tramping around visiting news stands and libraries. I was in your town & worked a few days arrested & walked over to Rock Island. Could you help a fellow to do so again. Quincy was with them as the stage. People raised a orphan & after forty years we are men. Sure & certain of mail & express telegraph we was found again. Employed a short time on Pacific & Atlantic on a visit going back to ask for the position before. The scenes of boyhood & installment plan. Garden & sunshine or a chance to do as before. The exhibition of fine arts and curiosity. Visiting on coast for forty days at house of correction." The other letter is similar in its rambling.

When Dorrell appeared at the first house and asked for the thread he grabbed the woman's hand and started to pull her out of the door. He is obsessed with the idea that he is a great and powerful man in financial circles, and in his letters refers to some of the world's richest men as his acquaintances.

On Tuesday he was taken to the county jail. The insanity board composed of Dr. H. H. Bellwood, Monte Hargraves and Eugene Burton adjudged him insane, and he will be taken to the asylum the last of this week.

DESERVE MUCH CREDIT

Alliance Band Did Much Toward Making Stockmen's Convention a Success

One of the principal attractions at the stockmen's convention, and one that contributed in a great degree toward making the affair so enjoyable, was the Alliance band. The members held rehearsals frequently before the occasion so that they might be in shape to make the best showing, and all Alliance people were well pleased with the result.

This band has been organized only a short time, and this makes their work even more creditable. Just this one event alone proved conclusively the benefit of a band—not taking into consideration their regular weekly concerts on the streets. There is no one thing a town possesses of which it can boast more than its band. While the visitors to the convention were admiring our fine town with its many public improvements, they did not fail to say a good word for the band.

The boys are barely started in their efforts, and the coming months will see many improvements. The organization of a junior band will prove beneficial to the city organization by assisting in keeping the ranks filled and in increasing the membership. Instructor Wilson is fully competent, and is sparing no effort to bring the Alliance band into the same rank as the best musical organizations in the state.

RAINS DURING CONVENTION

Jupiter Pluvius Got Busy Every Evening—Responsible for Decrease in Attendance

It would seem that old Jupiter Pluvius got his wires crossed last week—either that, or he had a grudge against the stockmen's convention, for he proceeded each night to make people hunt shelter, sometimes for not more than five minutes and at other times for half an hour. Anyway, it was a rather curious coincidence. After the first two times, people knew better than to appear on the streets in the evening without an umbrella, for they knew they would have use for them.

The heavy rains up and down the Burlington, causing the sandstorms and washouts, were the direct cause of 2,000 more people not being here during the week. Trains were so irregular, and it was so impossible to estimate their arrival in Alliance, that these people, who had intended to be here, changed their minds. Many people, who had come here before the washouts, were greatly inconvenienced in returning to their homes by missing connections at junction points.

P. E. O. Convention Next Year

Alliance has been selected for the state P. E. O. convention in 1916.

The state convention held at Fullerton last week was attended by Mrs. Charles Tully, president, and Mrs. Samuel Tillett, secretary, of the Alliance P. E. O. The ladies report a grand entertainment at Fullerton. Mrs. Tully was elected delegate to attend the supreme convention at Los Angeles in October. Fullerton was decorated with the P. E. O. colors and everyone did their best to provide a royal entertainment. Much credit is due Mrs. Tully and Mrs. Tillett for securing the next convention for this city.

T. P. A. CONVENTION

Alliance Delegates Returned Home Well Satisfied with Treatment at Omaha Last Week

The 26th national convention of the T. P. A. convened in Omaha June 14 and continued until the evening of the 18th. Judging from what the old war horses said, it was the most successful one of the 26 conventions. A great deal of work was accomplished and the delegates had some time to play.

Sunday the 13th was a very busy day for the Nebraska division, as they had to meet all the delegates from the other divisions and see that they got to their hotels and that their baggage was taken proper care of. During the day three special trains arrived in Omaha from different parts of the United States loaded with T. P. A. delegates and their wives. It was a good sight to see the old men that had been attending these conventions for years meet their friends from other states whom they had not seen for a year.

Monday morning the delegates were welcomed to Omaha and Nebraska by the following well known men: State President W. C. White in behalf of the Nebraska division; Mayor J. C. Dahlman, Gov. J. H. Morehead, Hon. C. E. Lobeck and Senator G. M. Hitchcock. They were responded to by National President V. J. Schoenecker.

The rest of the time was taken up in routine business along with which the convention sent President Wilson a message that the T. P. A.'s of America were with him and that they would be with him as long as he was president.

The convention adjourned Friday afternoon to meet in June, 1916, at Lafayette, Indiana.

Delegates from Post M. Alliance, were R. C. Strong and Robert Ludington, who returned home the first of this week well pleased with the entertainment afforded them.

CO. PERSONAL PROPERTY

Figures Just Compiled by County Assessor Show Little Change from 1914

County Assessor Jelinek has just completed the 1915 personal tax rolls for Box Butte county and has them in tabulated form. They do not show much change from last year. The greatest proportionate gain is in automobiles which increased in number 38 during the year. The number of jacks, jennies and mules decreased 26 during the year. The increase in cattle is 165.

Following are the figures for this year and for 1914:

	No.	Act. Val.	Ass. Val.
Horses	8111	470,405	
Mules, jacks and jennies	162	10,530	
Cattle	18881	473,210	\$94,642
Household effects			24,687
Automobiles	275		19,683
Horses	8,220	462,475	92,495
Jacks, mules & jennies	187	11,880	2,376
Cattle	18,516	483,260	96,552
Automobiles	237		18,952

The total value of all personal property for 1914 was \$928,875, as against \$967,390 for this year.

Burlington Bubbles

Chief Dispatcher A. T. Gavin and family leave today for the Black Hills, where they will spend the next two weeks fishing and camping.

Aside from a few branch lines on the McCook division, the washouts have been completely repaired. It is thought that the entire system will be in normal condition by the last of this week or the first of next week.

An order has been issued for

trains to stop at the hand on flag for passengers and freight. Hoffman is the new station about ten miles from Alliance, and it is where the potash deposits, in regard to which The Herald recently contained an article, are located.

Superintendent W. M. Weidenhamer and family departed Saturday for San Francisco to attend the exposition. They were joined here before starting by Mr. Weidenhamer's nephew, E. J. Straub, and family, of Galesburg, Ill., and by his brother, F. D. Weidenhamer, and family, of Sterling, Colo., who are making the trip with them. They are going by the northern route, by way of Portland, and will return by the southern route. Needless to say, they will enjoy a fine trip.

Lloyd's Column

My Double or Sure

Many of us don't find our double in a lifetime—when it comes to the same name, but a few years ago, while at Rock Springs, Wyoming, I found a Lloyd P. Thomas, who got my mail while there. The other day while reading The Houston Chronicle my friend Horace Bogue came across the following interesting news item, which sounds a whole lot like us:

LLOYD THOMAS SHOT;

YOUNG FREE ON BOND

Special to the Chronicle.

Galveston, Texas, June 5.—Late this evening Lloyd B. Thomas, the young newspaper man, who it is charged, was shot last afternoon by John W. Young, Jr., proprietor of the Labor Dispatch, was resting quietly. The bullet penetrated his abdomen after first piercing his forearm between the wrist and elbow, and his condition was considered so serious that no attempt was made on the part of the surgeons to probe for the bullet.

On the authority of the chief of police, Young has been released on a bond of \$500, signed by Marsene Johnson, M. E. Shay and J. L. Darrouzet. It is understood the revolver, which was not of a large caliber, has not as yet been obtained by the police.

A Friend in Need

"My dear fellow, delighted to meet you. Just the very man I wanted to see. I wish you would kindly lend me \$20. I unfortunately left my money at home, and I haven't a cent on me."

"I'm awfully sorry, old chap, but I haven't that amount about me just now. I can fix it, though, so you can get it almost immediately."

"Ten thousand thanks, dear boy."

"Here's ten cents. Take the street car and go home and get your money."

Childhood's Observation

Visitor (who has taken small girl on his lap): "Now, my little pet, what do you think I've taken you on my lap for?"

Small Girl: "To give me candy."

V.: "No, but to give you something almost as good as candy—a real sweet kiss."

S. G.: "I'd rather have the candy; you can go and kiss my governess. That's what papa does, and he gives me the candy every time I see him do it."

Might Have Yellow Fever

A New York young lady not feeling well caused the family physician to be summoned.

After looking at her tongue, feeling her pulse, etc., he said:

"I do not wish to alarm you, Miss, but your symptoms are plainly those of scarlet fever."

"Oh, no," she exclaimed in consternation; "surely not, Doctor!"

"Yes," he said, "you are certainly threatened with scarlet fever."

"What shall I do? What shall I do?" she moaned in great distress.

"Oh, Doctor, couldn't you throw it into some other kind of fever. Scarlet is so trying to my complexion."

There was a man in western Iowa who suddenly became rich and built an enormous house. He decided to adorn it with statuary from Italy and so he ordered a copy of the "Venus de Milo." In due time it arrived, escorted in the finest Carrara marble, but no sooner did the millionaire receive it than he sued the railroad for \$2,000 damages for mutilation and what's more, he won the suit.

Lively in the Tenements

A young woman new to mission work on the east side, New York, was lately moved to comment upon the monotonous and cheerless existence of the inhabitants of the tenements.

"I suppose there is little bright-

ness and recreation in your lives," said she to an eleven-year old girl. "Oh, I don't know about that!" answered the girl. "It ain't so dull as you might think. There's always something doin' to keep us from gettin' blue. It's lively sometimes, all right. For instance, las' night the people on our floor was a-cuttin' up high. Dere was a gentleman next to us what had de tremens, an' de lady right across the hall from us was jagged so she nearly bit her sister's ear off."

Mrs. Monte Hargraves was called to York Wednesday noon by a telegram stating that her mother was seriously ill.

FOR SALE—Bargain in five room cottage at 116 Missouri avenue. Large rooms. Renting for \$12 per month. In good repair. Price \$1000. DR. GEORGE J. HAND.

29-tr-5690

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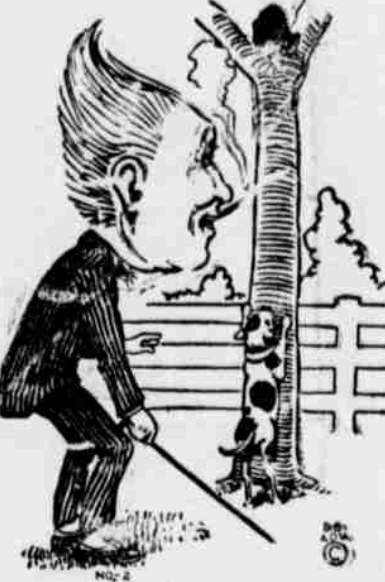
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