

NEW MACHINE HAS TWO BIG VIRTUES

Absolute Accuracy and Economy of Time Are Assured by Locally Designed Apparatus.

Absolute accuracy and economy of time and outlay are assured by a new connecting-rod fitting machine, recently designed and built by Harvey Z. Lockwood, service superintendent of the White company's Portland branch. The machine is now set up and in use in the company's service department at Park and Couch streets, where it may be seen by anyone interested.

In using the machine, the connecting rods and bearings are first prepared for fitting, the setting up of the rod in the machine insuring positive alignment in all respects, the piston pin being positively square and parallel to the crank shaft, with an equal amount of clearance on each side of the connecting rod, between the piston bosses. The adjustable features and the graduation on the angle plate insure that every rod will be the same length, and that the centering will be easy to accomplish.

The size of the crank pin, which corresponds with the connecting rod to be fitted, is taken with micrometers, the expanding three-blade reamer on the machine being set to the same reading as the micrometer. The hole is then bored and, by reason of the accurate mechanism of the machine, the hole bored is of corresponding size. By the use of a three-blade side cutter, the sides of the bearings are then faced and fitted to the lateral desired. A three-blade 45-degree cutter is then attached to the machine, and the fillet of the bearing is quickly relieved.

The outstanding features of the machine in connecting-rod fitting are the elimination of the following expensive processes, ordinarily in use:

- 1—The use of face plate, parallel blocks and mandrel to insure a piston pin parallel to the crank shaft;
- 2—The use of square and mandrel in squaring the piston with the crank shaft;
- 3—The filing of the sides of the bearings;
- 4—The scraping of the bearing fillets;
- 5—The excess time ordinarily consumed in all of the above-named operations, as well as possible negligence on the part of the workmen engaged on them.

The machine and its fitting being mechanically perfect, accuracy in every respect is assured. It can be operated as a lathe attachment on a work bench, or even on a service car in case it is necessary to fit bearings on the road.

Lockwood has originated a number of time-and-money-saving mechanical appliances. He has applied for a patent on this, one of his most important inventions.

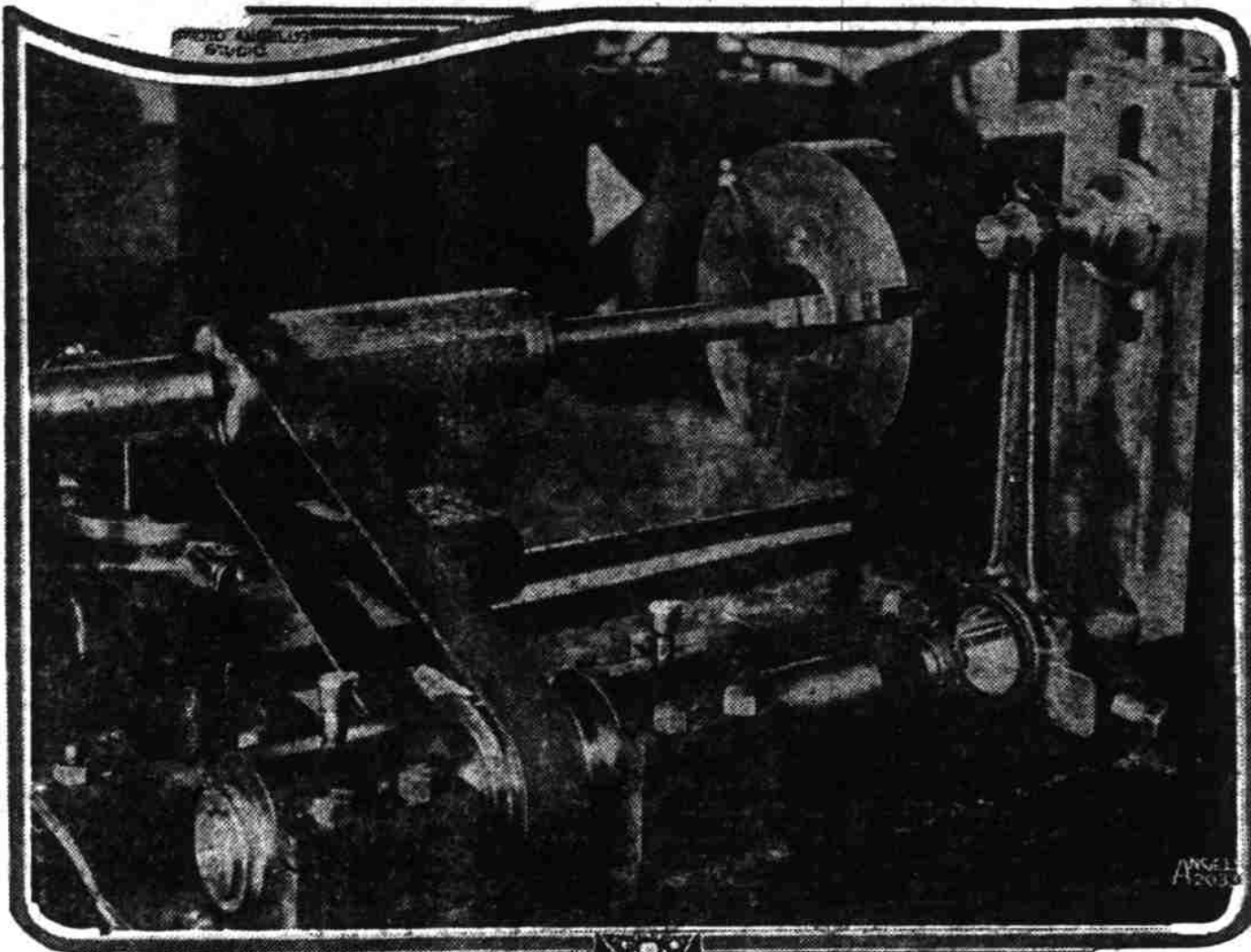
Caution Should Be Used When Parking Auto on Hillside

How many of you know how to park your car on a steep hill so that it will not slide down and hit something?

You will answer, "Bug, I know." Maybe you do know, but do you do it? The newspapers of the country have carried many stories recently of smash-ups due to cars sliding down hills, driverless, and smashing into something or someone, and there is rarely an excuse for it if the car is parked properly and necessary precautions taken.

The easiest way is always the best way, and it is so simple to park properly that none of us should be guilty of this neglect that might cost a life, or at least serious injury.

PORTLAND MAN DEVISES NEW MACHINE



Harvey T. Lockwood, service superintendent of the Portland branch of the White company, White truck manufacturers, is the inventor of this connecting rod fitting machine, which has been in operation in the White company for a short time pending issuance of patents.

A. L. SMITH WILL LEAVE PORTLAND

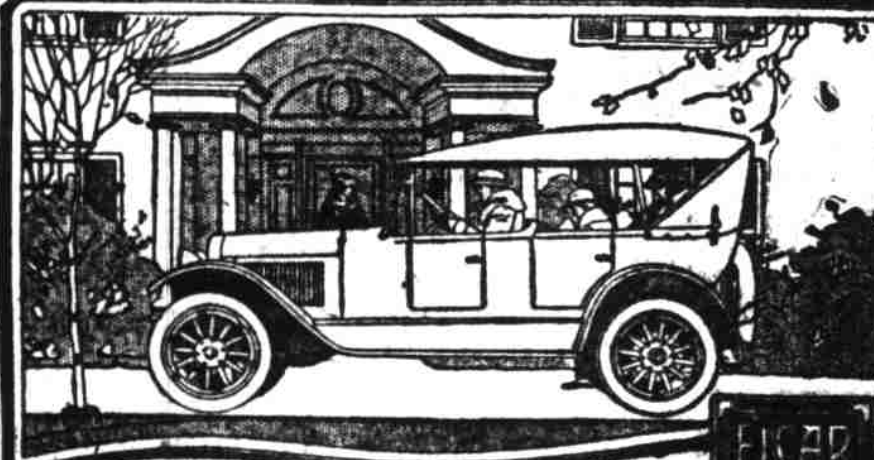
Well Known Automobile Sales Manager Plans to Go Into Business for Himself in Chicago.

A. L. Smith, for the past three years sales manager of the automobile department of Mitchell, Lewis & Staver, is severing his connection with that firm to return to Chicago, his home town, where he will go into business for himself, handling the nation-wide sales rights for the C. & G. valve grinder.

The C. & G. valve grinder is a Portland product, invented here and manufactured here by the Coin Machine company. The grinder has never been marketed aggressively, and although employing a new principle long felt needed in this kind of work by garage men, is comparatively unknown. The machine is driven by compressed air or electricity and has for its driving force a "tap" as well as the revolving motion needed in removing carbon from valves.

Its makers claim the "tap" smashes the particles of carbon and allows the valve to fit its seat with greater accuracy than that brought about by methods previously employed.

Associated with Smith in this venture is Wayne Harper, up to this time in business for himself here. Harper is a Portland man, while Smith has been in this part of the country only 10 years. The company will be known as Smith-Harper, Inc., and will have headquarters in the Windy city. Its sales activities will include every state, and although the device will be handled from Chicago as a center, there is no probability of its manufacture being removed from this city.



ELCAR

The Car of Excess Value

Check over the specifications of the ELCAR. Compare them with those of any car selling up to two or three hundred dollars more.

Then inspect the ELCAR in detail. Note the extra strong beautifully balanced chassis construction. Note the size, beauty and finish of the car. Test the luxurious cushions. Note the completeness and quality of all items of equipment.

Test the car. Note the lithic, eager way it responds to the slightest advance of the throttle. Observe how silently and smoothly it runs at all speeds from two to sixty miles an hour. Try it on hills or through deep sand, and see how wonderfully and quietly it pulls—then you will realize why the ELCAR deserves the title of "The Car of Excess Value."

A GLIMPSE AT THE QUALITY

Red Seal Continental motors in the sizes, Lycoming motors in the four, Delco Starting, Lighting and Ignition, Salisbury Pressed Steel Axles, Borg and Beck Clutch, etc. Get the rest of the interesting story from the catalog we have for you.

Brunn Motor Car Co.

28 North Broadway Broadway 2958

SOME ATTRACTIVE TERRITORY OPEN FOR LIVE DEALERS—WRITE OR WIRE

Head of Jordan Co. To Visit Portland Last of This Month

Edward S. Jordan, president of the Jordan Motor Car company, will be in Portland Friday, October 29, for the purpose of addressing local organizations on salesmanship and business methods governing modern business.

President Jordan is being sent on this mission by the National Advertising clubs, the National Automobile Chamber of Commerce, the National Automobile Dealers' association, and the National Good Roads and Highway association. His stay here will be brief.

Distribution Rights Of Elcar Are Taken By Brunn Company

Distribution rights for territory outside its former limits has been awarded the Brunn Motor Car company, Elcar distributors for Oregon, according to an announcement made public by Isaac Brunn, president of the company, last week.

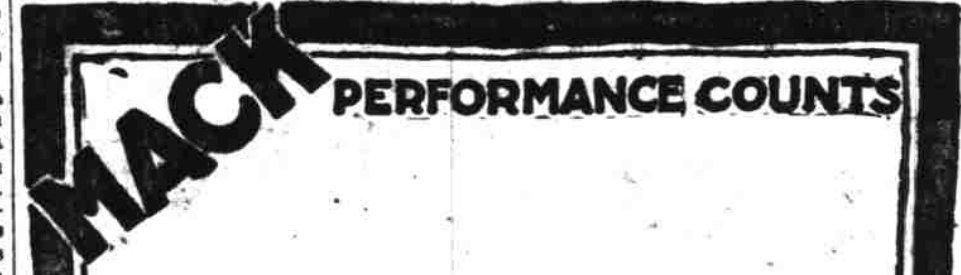
With this additional territory Brunn will receive additional allotments of cars which he expects to allocate to his dealers throughout the state, as shipments make this possible. Brunn formerly had the distributing

rights for the Lexington, but gave up the agency for that car and is now centering his attention on the Elcar alone. Brunn at the present time is organizing his force for a winter drive and is appointing more dealers throughout his district.

The Elcar is of long standing and has been in the hands of Brunn for a considerable time. The Elkhart Carriage & Motor Car company, Elkhart, Ind., are well known manufacturers of carriages and other equipment, and with their entry into the automotive manufacturing business some years ago, became famous for the coach work on their motor cars. The Elcar is manufactured in six and four cylinder models, the six having the new Continental 7-H motor and the four with the Lycoming power plant. Delco ignition is used, and other standard equipment is customary. Shipments of cars from Elkhart are expected in the near future.

Ignition Circuit Needs Tight Hold

Do not forget that the ground connection of the ignition circuit should have a dependable connection to the metal parts of the car. If the connection is at all loose or is made by including the wire under a nut or bolt head, the metal parts should be well cleaned and made bright before being tightened and the end of the ground wire should have a terminal of brass soldered to the wire.



Truck Price Bubbles

Every child knows the size of the drop of water determines how big the bubble will be. There's a limit to every bubble, then it bursts.

The same may be said of the prices of some motor trucks. They were inflated to the bursting point. The public wouldn't pay the price, so to make sales, although other excuses are being assigned, prices had to be reduced.

Not so with MACK truck prices. In eight years the average increase in MACK truck prices has been only 15 per cent. This increase has been governed entirely by the cost of production. Production costs have not declined, so MACK truck prices will not be reduced.

MACK truck prices always have been honest prices.

MACK-INTERNATIONAL Motor Truck Corporation

Tenth and Davis Streets Broadway 691

COLE PRICE STAYS; FIRM GIVES ALIBI

The Cole Motor Car company of Indianapolis, has just sent an announcement to all its dealers and distributors definitely stating that there will be no reduction in Cole prices.

"Cole prices have always been kept on a reasonable plane," says D. L. Dougherty, sales manager of the Northwest Auto company, distributors for the Cole. "Increases have only been made when they were deemed absolutely necessary due to advance in material and labor, or the cost of improvement to the car itself."

"In 1918 the company adopted the policy of constantly manufacturing a finer motor car, adding thereto from time to time such improvements and refinements as have proved to be of value to our owners."

"It is absolutely contrary to their basic program to let any condition interfere with this purpose to build a car that at all times represents the highest value which it is possible to build for the price it bears."

"Furthermore, it is not the intention of the Cole factory to let anything stand in the way of the development of its product, and will not hesitate to add to its refinements and efficiency whenever and wherever possible."

"The Aero-Eight has been the factory's standard product for three years. Its design is basically correct, cleaned and attractive. All of Cole's resources of engineering skill and workmanship are being devoted to the further refinement of their car rather than the production of yearly models."

India Is Fourth India assumes fourth place among the world's nations as a market for American made motor cars.

Gasoline Substitute Sought The British government is conducting extensive researches to discover a liquid fuel that will combine satisfactorily to take the place of gasoline.

UNIQUE MOTOR VEHICLE TRAVELS FAR



Mr. and Mrs. George C. Rising and daughter and Mr. and Mrs. L. D. Outler of Windsor Locks, Conn., and their Red Speed Wagon with which they made the trip across the continent. The party came through New York, Pennsylvania, Ohio, Minnesota, Indiana, North and South Dakota, Montana and Idaho. The photo was taken in front of the salesrooms of the Northwest Auto company, where the party made their headquarters while in Portland.

Canadians are paying from 26 cents to 43 cents a gallon for gasoline.

STANDARD EIGHT



A POWERFUL CAR

To have all the power you are likely to need is like having all the money you are likely to spend—you would feel more secure if you had just a little bit more.

The power of the Standard Eight is a little more power than any driving condition is likely to warrant.

Spare power, like a spare tire, is something seldom used, but its mere presence is a blessing. To the beauty of line and appointments of the Standard Eight we have added the feature of extra power. No one who rides in a Standard Eight need ever fear inadequate power.

Vestibule Sedan, \$5000 Sedan, \$4800 Sedanette, \$4500 Coupé, \$4500 Touring Car, \$3400 Roadster, \$3400 Chassis, \$3150 Above prices L. & L. Buell, Pa.

LEWIS E. OBYE MOTORS CO.

DISTRIBUTORS

BROADWAY AT COUCH

SOME DEALERS' TERRITORY OPEN

