## LIGHT BEAMS USED TO MEASURE LIMI

Oakland Factory Ploneer in Adopting Many Scientific Instruments

Instruments, once confined to the laboratories of scientists, are now found as every day working tols in some of the finer automobile factories, so exacting have become their measurement and fit requirements, in their endeavor to whip vibration and lengthen the life of wearing parts,

With higher standards have come closer limits of fit and balance. The ten-thousandth of an inch supersedes the the thousandth and the thousandth replaces the hundredth which has necessitated new scientific instruments to gauge the finer limits and assure the results expected.

One among the many scores of scientific devices used in measuring the close limit operations in Oakland Six factories is the crankshaft vibration balancing two thousandths of an inch.

Another product of

Handy, nationally

famous as builders

of standard automo-

tive equipment.

machine which uses a light beam under octagonal prism glass to measure the unbalanced condition and to indicate its location and amount at any point on the crank

For years the light beam has been used for experimental work in fine limits in the scientific laboratories because a light beam will pass through the most minute opening—an opening which can neither be seen nor determined by any other type gauge.

Thus as the crankshaft spins in its testing machine, the operator detects the exact point where the vibration is set up and by grinding a few minute grains of steel from the point indicated brings the crankshaft into almost vibra- parents to pay close attention to tionless travel.

This balance testing instrument s a development of the General Motors Research Division and the Oakland Division is pioneer in its use in factory production.

Some idea of the ruthless demand of engineers for more severe limits may be appreciated when it is told that 33 operations in Oakland Six engine parts are rigidly held within three- tenthousandths of an inch. 30 operations within five-tenthousandths, more than 100 within one thousandth and more than 200 within

HANDY

KEEPS MOTOR OIL CLEAN All The Time.

The oil you discard when you drain your crankcase

has not lost its lubricating value. It is only dirty. The

Handy Oilffltor with its special filtering element-

FILTOREX-cleans this oil-removes every particle of

dust, dirt, grit, metallic filings and other foreign matter,

and pours it back into your engine at the rate of a PINT

a minute. It works constantly whenever your motor is

running. Instead of changing your oil every five hundred

miles, you replace the FILTOREX after each 3000 to

5000 miles. It is cheaper—and better, too. Handy does what any number of oil changes cannot do. It keeps oil CLEAN ALL THE TIME. One size Oilfiltor fits all

makes and models of cars. It is low in cost. Easily and quickly installed under the hood of your car by any

COLYEAR MOTOR SALES CO.
455 Ferry St. SALEM, Oregon Telephone 2488



AAA Seeks Cooperation of Parents in New Line of Endeavor This Year

WASHINGTON, D. C., (Special) Spring like weather, returning to all parts of the country and stimulating the play spirit of millions of children, places an especial responsibility upon youngsters' outdoor activities, says a statement issued today by National Headquarters of the American Automobile association in which an appeal is made to fathers and mothers to take a larger part in reducing traffic mis-

haps involving children. Because they have no other place to play, millions of youngsters take their bats, balls, tops, marbles and skipping ropes into the streets, creating a tremendous traffic hazard, orficials of the national motoring agency point out. It is the function of the parents to discourage this practice whenever and wherever possible and to make this work constructive parents should assist their children in finding play space that is safe. A little effort along this line will prove well worth while, according to Thos. P. Henry, president

of the A. A. A. "Children will play and if no other place is available they will take to the streets regardless of traffic conditions," says Mr. Henry. "Telling a youngster to keep out of the street is not enough. Even the obedient child forgets, in its enthusiasm for baseball. rope-skipping or some other form of play, that the street is danger-

"The wise parent will go farther than merely telling the child not to play in the street. He or she will attempt to find an available safe place to play. School playgrounds, of course, are available to thousands of youngsters. Many, however, are left unprovided for in this scheme, which constantly is being expanded.

"It is unfortunately true that many owners of vacant lots, which make ideal playgrounds, forbid youngsters to us them for

this purpose. "Parents, in such a circumof service to themselves, their children and the cause of safety. neighborhood approach the irras- hundreds of pounds. Yet all work cible owner in the proper way they may find it relatively easy to induce him to change his position. Motor clubs in various parts of the country affiliated with the A. A. A. have assisted in this work and their records show very few failures."

Conditions vary in each com-

task of finding playgrounds for analysis and study. their children usually will find the parents does not end even here, it is pointed out and, whereever it is possible, it is urged that parents supervise the play of

On this point, Mr. Henry says: "After a playground has been found, the parent of the very small child, at least, should see to it that the youngster is conducted safely to the place and accompanied by a responsible person, for the journey both ways usually is made when traffic is at its height. Of course, it is not likely that very many parents actually can find the time to supervise the after-school play of their children but those that can do so should not let anything else

"We are a long way, perhaps, from the Utopian era in which children will have adequate play space that will keep them off the streets, but there is much that parents can do to bring that day nearer. It is to be hoped that gerous one, will be marked by real progress in that 'direction."

#### Motor Tax Refund Due

in the next few days automobile your car. dealers will receive checks in settlement of their old claims for e- draws off engine fumes and preturn of luxury tax. About six vents oil dilution, the oil filter, years ago a luxury tax was put the air cleaner, the gasoline on cars and afterward removed. Dealers who had paid the tax on all the Buick advancements that unsold cars claimed a refund. The total runs well over a million dol-

Chas. K. Spaulding Logging Co., iumber and building materials. The best costs no more than inferior grades. Go to the big Salem factory and save money. (\*)

VALUE OF BUICKS STARTS IN HOME

the surgeon like precision of pattern makers' tools; the brawny muscles of huge molders contrasted with carefully trained hands of Bishop, 350 N. High St. draughtsmen.

In a single trip through the Buick factory you can see men performing work so fine that it is stance have a real chance to be measured in thoudandth parts of an inch and other men handling with cranes great buckets of If the organized adults of a molten metal that weigh many of Buick's slogan, "When better automobiles are built, Buick will build them."

Wherever possible, machinery does the work, instead of human hands. Even the smallest operation is carefully studied to reduce waste motion and waste material Careful plans are made to save steps for the workers. Many of these things seem hardly worth considering in themselves but, totaled up, they represent a vast saving to be used in putting greater value in the Buick.

Equaling the excellence of the great factory and its wonderful manufacturing equipment is the strength of the Buick personnel. which directs the development of the Buick product and Buick policies. The two-production facilities and capable men-combine to give Buick an organization as noteworthy for its qualities as the Buick car itself.

Nowhere in the industry does one find such a remarkable group of leaders-men, each a recog nized authority in his special field, banded in one organization and devoted to the same ideals.

The Buick organization, again like the Buick car, has been long in the making. Several of the executives have been with Buick since the very beginning, others joined shortly after, while most of the men now holding respons ible positions have been with Buick for at least ten years.

In the three great divisions of the organization — engineering, manufacturing, and executive are found men of unusually high calibre, men of standing and of broad and practical experience and knowledge. For years they have been contributing their best effort and applying the benefits of their experience to the improvement of Buick cars.

As any manufacturer, or architect, know, it is one thing to plan and quite another to produce and distribute economically and effi-ciently what has been designed. Because Buick executives in the various departments have been working together so long and have such a keen interest in their mutual problems, their forces have been co-ordinated to a point where the greatest possibilities of skilled engineering, precise manu-facturing and advanced marketing are available to Buick owners. Employes, too, in the many Buick plants are men and women of un-usual ability and understanding. Most of them have been with

Buick for many years.

At this point, it is interesting to know that the same engineers who still direct the work of de-signing each new Buick car were on the original Buick engineering staff, and collaborated in designing the first Buick valve-in-head

notor car. Under their veteran hands, the Buick engineering department has rown to a grouter size than the

munity, but the parents who set tific laboratories have been built themselves intelligently to the up with complete facilities for

All this scientific apparatus, their efforts successful, the state-ment declares. Responsibility of and investigation that is going on through its use, has helped to make possible the Buick car of today. For it is through the development of new alloy metals, through the new application of old engineering principles, through the gradual refinement of the chassis, part by part, that progress is achieved.

> You can appreciate the full meaning of the Buick factory only by examining the Buick car, comparing it with other cars, and with Buicks of former years.

> Buick is proud of the cars that it built in the past. Each represented the furthest development possible at the time. But contrasting these models of former years with the 1927 Buicks you see amazing advancement. Yet prices are comparatively un-

In that fact lies the true significance of the Buick factory.

The counterbalanced crankshaft, the torsion balancer, the the current season, usually a dan- rubber mountings for the engine, all the things that make the performance of the 1927 Buicks vibrationless beyond belief, are made possible because of the savings and economies effected by in Canada Very Soon the Buick factory. Money saved on one operation is used in apply-MONTREAL. (Special)-With-ling some other advancement to

The vacuum ventilator that strainer, Buick four-wheel brakes, have contributed so much to motoring pleasure and satisfaction, are due in large part to economies that are possible only in a plant of the tremendous size of Buick's. Study the bird's-eye view again,

Could you express the significance of this gigantic group of buildings in a single phrase? It can be done.

This is the significance of the Buick factory - extra value in your Buick car.

Mr. Used Car Buyer: Have you seen the real buys at the Capital Motors Incorporated? See Biddy phones 2125 and 2126.

This is The BEAUTIFUL



Topping the "Sixes" in the wide Paige line of "Sixes" and "Eights" is the magnificent 6-75. This Paige is a big car; extremely well made, and beautifully styled. And yet it is not costly. Indeed its price is so moderate, in relation to its size and luxury, that it is attracting many of those who prefer the greater comfort of a large automobile.

Much of the charm of the 6-75 models is due to the consummate skill with which Paige body de-

signers have achieved interior roominess without sacrifice of graceful exterior lines. Notice the graceful sweep that extends from the ball back of the top to the tip of the front fender. Note the great length of the car, and its lowness accentuated by the clever blending of the two tone colors.

To appreciate fully the true magnificence of this

motor car, you must said into its luxuriously unfolstered cushions, to its wheel and actua drive. For in addition to its great beauty, and its exquisite appointments it performs beautiful When may we take yo on a demonstration drive — there's no obligation

Phaeton are also available to 6.75 chassis at similarly fow in The complete Paige line of a models offers a wide varies election at prices from \$15 \$2795. All prices f. s. b. fe

# PAIGE

#### TRUMM MOTOR COMPANY

347 North Commercial.

Telephone 959

The New Paige 8-Now on Display in Our Show Room

"the Greater Oakland Six continues to be the finest built car of its price in the world'

A recent Oakland advertisement contained a statement which has attracted extraordinary atten-tion. It said in part, "... Oakland is going to unheard-of lengths to make certain that the Greater Oakland Six continues to be the finest built car of its price in the world." And in support of that statement there were listed some of the extraordinary precision operations employed in the manufacture of the Greater Oakland Six.

Now you may not be interested in the fact that Oakland piston pins are diamond-bored to three ten thousandths of an inch-that all rotating parts from crankshaft to rear axle are balanced to eliminate vibration at every speed—that every connecting rod is inspected both for accurate weight and for proper location of center of gravity.

But if you are going to buy a car at anywhere near

Oakland's price, you cannot disregard the fundamental meaning of such rigidly controlled quality-

—for it is the very source of long life and of satisfactory operation for month after month . . . and no other car of Oakland's field embodies so many instances of costly car super-precision.

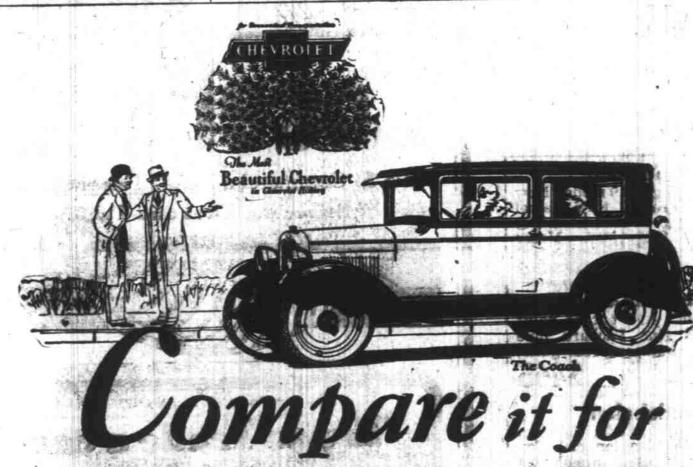
You can observe at a glance the rich external beauty of the Greater Oakland Six—for the bodies, finished in rich, new colors of Duco, reveal Fisher craftsmanship at its best. But to learn the basic reason for Oakland's ever-growing good will, you must actually drive the car and talk to Oakland owners—must experience the car's thrilling acceleration, handling ease and road mastery—must learn from those who know that exacting care in manufacture pays perpetual dividends in owner satisfaction! Come in—have a demonstration—and then compare values. then compare values.

Oakland Six, \$1025 to \$1295. The New and Finer Pontiac Six-at New Low Prices-\$775 to \$975. Bodies by Fisher. All prices at factory. Easy to pay on the General Motors Time Payment Plan.

#### VICK BROTHERS

ASSOCIATE DEALERS

The Greater PRODUCT OF GENERAL MOTORS & & WINNING AND HOLDING GOOD WILL



#### Арреатапее

Only in cars much higher in Only in cars much higher in price will you find such smarr-ness of line, such beauty of design and such elegance of appointment as in the new Chevrolet! Compare its appearance with that of any car at anywhere near Chevrolet's low prices—and then you will know why it has everywhere been acclaimed as the Most Beautiful in Chevrolet history! history!

> New Fisher Bodies, beautifully beaded and paneled; Finenickeled hardware; Smart new Duco Colors; Fullcrown, one-piece fer-ders; Bullet-type head lamps; Higher, more massive radiator; Cow! Lamps; "Fish-tail" modeling of rear decks an 2-passenger models.

#### Performance

The performance of the new Chevrolet is literally amaz-ing. Incredible smoothness at every speed—flashing ac-celeration that is a delight effortless shifting of gears finger, p steering remark-able east of parking. One ride at the wheel, and you will understand why the new Chevrolet has been the greatest sensation of Amer-ica's greatest industry!

Valve-in-head motors Three-point Motor Suspension; Strongand sturdier frame; Singleplate disc-clutch: Long. semi-elliptic springs. Full size 17-inch steering wheel; Balloon tires; Deeply uphol-stered cushions; Semireversible steering gear; A C Air Cleaner; AC Oil Filter.

## Price

Comparison of delivered prices reveals Chevrolet's prices reveals Chevrolet's value supremacy. Delivered prices are f.o. b. prices plus charges for handling financing, etc. The financing charges of General Motors Acceptance Corporation are the lowest available. Handling charges are in proportion. Thus, Chevrolet delivered prices are even more ered prices are even more amazing than the Lo.b. prices.

> Coach The Touring

Newton Chevrolet Co. Opposite the City Hall

"EVERYONE IS TALKING CHEVROLET"

UALITY