

Entered as Second-class Matter at Postoffice, Indianapolis, Ind.

INDIANAPOLIS, SATURDAY, FEB. 11, 1928

Full Leased Wire Service of the United Press Association.

FEW OUTSIDE OF INDUSTRY AWARE OF TASK REQUIRED FOR NEW AUTO CREATIONS

Automotive Business Stands Alone Among Manufacturers of World, in Experimenting and Improvement.

MARKED IMPROVEMENT EACH YEAR

Public Sees Little of Process That Has Developed and Still Is Turning Out Cars; Work Not Spectacular.

BY E. T. STRONG
President Buick Motor Company

Of all the visitors at the automobile show, few outside the industry sponsoring that exhibit appreciate the years of toil, of testing, and of endless experimentation which have made possible, at prices within the reach of all, these luxurious automobile creations of today. The automotive industry stands alone among all the multifarious industries of the world, both in the extent of this experimenting and in such aggressive self-improvement.

It is considerably easier to sell a bar of soap than to sell an automobile. In fact, with the exception of a home, the automobile is the largest single item in the average family's purchases, and this fact is reflected in the care with which cars are chosen. The size of the automobile investment has spurred competition among the makers of motor cars, and thus has been an important factor in the constant improvement witnessed by passing years.

This same vast difference between unit values has also necessitated safeguards against dissatisfaction with the product, another important goal of automotive experimentation. The sale of an unsatisfactory bar of soap is trifling, in its power to harm the maker, compared to an unsatisfactory sale of so large a unit as a motor car.

The correspondingly deeper ill-will resulting from the latter sale may make itself felt very seriously, and so manufacturers have willingly undertaken heavy expenditures to insure satisfaction.

Literally Built Upon Failures

Motor cars of today are literally built upon failures—not failures of the product itself, but failures of experimental material and designs of which the public has known little or nothing, failures in the laboratory. Only the experimental men of our automobile manufacturing concerns can appreciate how aptly the phrase "construction by destroying" fits the long tedious process which has given us our motor cars.

Automobile makers have had to maintain a constant and costly search for the new and better thing, while at the same time producing and marketing the best of which they were capable at the moment. All this has gone on behind the scene.

The motor car is the largest piece of machinery customarily entrusted to untrained hands. The great majority of owners, while steadily learning more about the use of cars, are really untrained in their operation or proper maintenance, and this fact means in the manufacturer with problems rarely encountered by workers in other lines.

The safety factor has to be considered very seriously—those details of design, material and workmanship which will best promote the welfare of the driver and the public.

The manufacturer's problem would be simpler, if, like the locomotive builder, he were turning out a product for use by experts only. As it is, he must take every precaution to insure satisfactory performance, as well as the safety already mentioned, in the hands of persons most of whom are entirely unskilled in the care and use of cars.

Cars, unlike locomotives, must perform on all roads, without expert attention being given to them. They must be built to withstand abuse as well as legitimate use—to deliver much more than the reasonable and normal service required of other commodities.

Many Worked Changes
Each ensuing year has seen marked improvement in motor cars. Twenty, and even ten, years ago, these improvements had to do largely with mechanical features. The fundamental design of the internal combustion engine and of the motor car itself, were evolving rapidly. Transmissions were undergoing basic changes and so were steering gear, springs and many other units, not only in design but in materials as well.

In that day, many of these changes were little short of revolutionary. It required years of practical demonstration upon the road to vindicate them and bring about the condition which exists today.

Fundamental design and material are now rather similar among all cars. The internal combustion gasoline engine, developed to varying degrees by different makers, has displaced other types of power plant as the driving force.

A chassis consisting of frame, power plant, wheels and springs is the standard body mounting, its adaptation to its function varying greatly among different makers, but its general form so well defined that the word "chassis" has a very definite meaning.

Such features as rear drive, electric starting, lighting and ignition,

and four-wheel brakes are almost universal, differing among themselves, only in the degree to which they are refined. Some makers have devoted special attention to the operating ease of their product, yet the fact remains that the man who can operate one car can, comfortably or otherwise, operate them all.

Changes Not Indicative, However

If a hundred persons were to arrive at the same solution of a mathematical problem, the probability is that the answer would be correct. The fact that automobile manufacturers, attacking their problems by different methods and from different angles, have arrived at results even as similar as they are, would seem to indicate that the materials and mechanical design of motor cars will undergo few basic changes while the conditions of which cars are built remain the same.

Modifications still are being made from time to time, but these are in the nature of refinements rather than sweeping changes affecting basic design.

Location of the engine beneath the hood at the forward end of the chassis, with power application at the rear wheels through a propeller shaft, by means of gears, is standard throughout the industry. It has displaced all the earlier arrangements, which located the engine variously beneath the seat, under the floor board, or in what is now the rear deck, and which employed belt, chain or friction drive for power transmission.

The transition from the noisy, uncertain and by modern standards, ugly, vehicles of yesterday to the consummate elegance typified by cars of today has been very gradual. It was affected through the yearly model system, adopted by early manufacturers as a means of incorporating in their product the improvements suggested by experimenting. That this plan has made for progress is shown by the experience of those who have tried to inaugurate improvements at odd times and who have found that the improvements were less sure of accomplishment, and more costly, under that arrangement.

Development Process Little Known
The public sees little of the process which has developed and still is developing our motor cars. The work is not particularly spectacular, though some of its results, viewed in perspective, are strikingly so. It consists, roughly, of devising new materials to do a given job more efficiently, forming new combinations of materials already known—that is, changing design—to gain the same end, and originating new equipment and manufacturing methods, in the interests of a better and a less expensive product. Chemical, metallurgical and physical laboratories are the three principal agencies in this work of pioneering.

Spurred by the needs of the automotive industry, which ran into countless problems when the quantity production era dawned, these agencies achieved results whose benefits extend far beyond the limits of the industry which set them in motion. They have given the world pyroxylin lacquers, which are now used everywhere, and lacquer-impregnated fabrics of marvelous beauty and adaptability.

Officials in Charge of Indianapolis Auto Show



WHOLE COUNTRY IS ONE BIG TOWN BY REASON OF ROADS

BY G. M. WILLIAMS,
President Marmon Motor Car Company

From a federation of selfish, isolated state into one big town in a century and a half—surely but a brief period in the ages of nations—certainly is America's greatest accomplishment.

Twenty years ago the man from the Panhandle in his five-gallon hat and his chaps grinned derisively at the man from Pelham Manor in his derby and his spats. Neither understood the other or regarded him as a citizen. Both were in the same boat, but they were not chummy passengers.

Today the sagacity of a Sherlock Holmes scarcely could tell the difference between a Californian and a New Yorker—between a Texan and Connecticut Yankee.

What has brought about this change? Primarily, I should say, two things—the inherent desire of Americans to go places and see things; concurrently, the determination of Federal and State Governments alike to build just as many good roads as is as short a time as the National budget would permit.

Roads Join Nation
If there had been a Dixie Highway in 1861 there would have been no Civil War. America today, thanks to our good roads program and the courage and dispatch with which it is being developed, is no longer borne down in battle of sectionalism.

It is, in reality, just one big town—a town with an absolute com-

munity of interest and a town in which the average citizen is perfectly familiar not only with the principal stores, but with the alleys and byways as well.

The basis of peace and development is mutual understanding and good roads and constant communication, which one, one with another, have given the American people that understanding so necessary to our national development. Good roads and motor cars, to all practical purposes, are synonymous. Where there are good roads there are motor cars and where there are motor cars there must be good roads.

This summarized is the status of our good roads program as recently supplied by Washington.

Part of Program Finished
More than a third of the roads provided for in the Federal aid highway construction program are complete. So far, under the plan, 64,209 miles of new highway have been opened to travel, a distance that would span the continent twenty times, twice encircle the globe and more. In Illinois alone better than 1,500 miles of highway have been completed, to which will be added some 5,000 additional miles.

There is little need to point out the influence of American road building, with its resultant con-

vergence of social, economic and political interests on the sister republics of the Western Hemisphere. Cuba, for example, has started a 700-mile roadway, bisecting the little island from tip to tip, costing upward of \$75,000,000, and entailing the employment of an army of 5,000 men. It is the same in Central and Latin America, where the advent of the motor car has stamped new roads as imperative, and has hastened progress in every field.

Last year there were forty motor vehicles registered in the United States to every mile of improved highways of every type.

But the Federal aid program calls for more than 120,000 miles of additional roads—good roads that will make travel by motor car convenient and desirable, and will increase the demand for motor cars to a point as unbelievable now as our present status was beyond the bounds of ordinary conception two decades ago.

Tops All Business

At first blush, the fact that in twenty-odd years the automobile industry has risen from nothing to a place where it tops in volume of business done and in economic importance every other industry seems incomprehensible.

On second thought, the phenomenal success of the automobile industry was inevitable—at least, it was inevitable the moment our Federal Government made up its mind to penetrate every corner of the Nation with good roads.

And the day is not far distant when America's good road program will extend to the northernmost point of Canada and the southernmost reaches of South America.

CURTAIN TO RISE ON 1928 AUTO EXPOSITION AT FAIR GROUNDS MONDAY NIGHT

Seventeenth Annual Show Expected to Be Biggest and Best in History of Indianapolis Auto Trade Association.

INTEREST IS KEYED TO HIGH PITCH

Hours of Exhibit From 10 A. M. to 10 P. M. Each Day; Girls' Orchestra Will Furnish Music Afternoon and Evening.

BY SWEDE SWANSON
Automobile Editor of The Times

The time is here again for the full dress parade of the automobile industry and Indianapolis distributors and dealers are working at fever heat to have everything in readiness for the seventeenth annual automobile show which will be thrown open to the public at 7 o'clock Monday evening at the State Fairgrounds.

And we have it from no less an authority than John Orman, show manager, that the 1928 exposition will be the biggest and best in the history of the Indianapolis Auto Trade Association, under whose auspices the event is held.

Practically all of the cars, with the exception of the DuPont and Cunningham, which were on display at the two national shows—at New York and Chicago—will be on hand. There will be cars of all types, descriptions and price.

There will be sedans, landaus, coupes, snappy roadsters, touring cars, better known now as phaetons; there will be custom-built bodies, special speedsters and several of the companies will display cut-away chassis, so that show visitors may see what makes the wheels go round.

This is a year of newness.

Of the total number, there will be at least fifteen cars that have been introduced within the last few weeks. And of the others, there will be many models that are being shown at the auto show for the first time. So there naturally is unusual interest in the show and it is safe to say that those who visit the exposition will see more newness than for many years.

In addition to the passenger cars, the show will be made up of several makes of trucks and about twenty-five accessory displays. The accessory division is curtailed this year due to the great demand for space for seven cars. In the last few years, the terraced portion of the building adjacent to the pit, has been lined with displays of accessories and equipment but only the south side of the terrace will be utilized for that purpose this year.

Expect Record Attendance

If automobile shows in other cities like New York, Chicago, Philadelphia, Boston, Detroit, Cleveland and Cincinnati, may be taken as a criterion, all records for attendance at the local show should be shattered. Reports from the critics mentioned indicate that interest in automobiles this year is at high pitch, and Indiana is certainly no different than other section of the country. Manager Orman is preparing for large crowds each day and night.

The hours of the show after the opening at 7 o'clock on Monday night, will be from 10:30 a. m. until 10:30 p. m. each day up to and including Saturday. Music will be provided each afternoon and evening by the Trio Orchestra, a group of accomplished jazz musicians from Chicago. Their repertoire consists of lively jazz to tuneful melodies and their part in the entertainment is expected to meet with ready approval.

Building Bower of Beauty

There probably is no auto show in the country that excels the Indianapolis show from the standpoint of decorations. Ralph Edgerton, local decorator, has the job in hand this year. He has had a corps of workmen busy for more than two weeks, converting the auto show building into a bower of beauty. A real treat is in store for those who go to the pleasure from the decorations as well as inspecting the rows of beautiful motor cars.

One element which has centered the attention of the public on the new cars, is the recent price reductions, particularly in the low price field. In this classification, show visitors will have their first opportunity to see under the same roof the new Fords, the new Chevrolets, the Perfected Whippet and the new Star cars. The show will offer a splendid opportunity for comparison augmenting the many probable arguments that have been going around since the recent announcements of these cars.

The smaller cars have longer wheelbases, roomier bodies, increased power. They offer little that is strictly new to the industry, but they offer a great deal that has

been found heretofore only in more expensive cars. The trend toward efficient four-wheel brakes has reached the low class field without exception. Fuel, air and oil filtering or cleaning devices are no longer confined to the higher priced fields. Five to ten miles an hour have been added to the maximum comfortable driving speed. Accelerating ability, both in second and high gears, has been pepped up further to meet the needs of ever-growing traffic congestion.

Style trends of last year have been carried farther both in line and in vividness of color. High price no longer carries a monopoly on beauty. Pull crown fenders are to be found in every class. Balloon tires, many larger than heretofore, are taken for granted, not only as a utility, but contributing to appearance. Lacquers in all colors of the rainbow are employed in giving the cars a dashing style.

Big Cars in Low Price Field

Restyled and vastly improved in both appearance and performance, the new Pontiac, Erskine, Essex and others, will contest for honors in the low-price, six cylinder field. Slightly higher, the new Dodge Victory Six, the Oakland, the small Nash, the Chrysler 62, and others will bid for attention.

In the next price interest will continue to center in the Buick, Chrysler 72, Nash, Hupmobile Six, Hudson, Auburn, Marmon and a few others. In the high-price field, as is to be expected, manufacturing efficiencies show up either in a very marked increase of value or extensive price reductions, if not both. Cadillac, Packard, Franklin, La Salle, Stutz, Pierce-Arrow and Chrysler 80 are more beautiful than ever before and at prices which make the public ask, as they do of the Ford, Chevrolet and Whippet.

"How can the manufacturers do it?"

CATTLE RUSTLER FLEES FROM CRAWFORDSVILLE

Sells Five Stolen Steers for \$389; Pays \$5 Debt and Escapes.

By United Press
CRAWFORDSVILLE, Ind., Feb. 10.—Police authorities are searching for a modern cattle rustler, bold as any of his western prototypes in pioneer days, who stole five steers from a pasture on the farm of Clark Sutherland, near Roachdale, drove them sixteen miles in the night to Crawfordville, disposed of them for \$389 and disappeared before the owner missed them. The steers were in a herd of thirty-four owned by Sutherland and pastured along a highway that runs past his farm.

The rustler, alleged to be a man who formerly lived in this community, sold the cattle at the Crawfordville shipping yards. As soon as he had obtained a check for the cattle from George Keller, he appeared at the office of Samuel D. Symmes, county inspector of weights and measures, with the surprising announcement that he owed Symmes \$5 and wished to pay the debt, many years old. Symmes then identified the man as John W. Watson at a bank where the \$389 check was cashed. Symmes received his \$5 and the man disappeared.

EXECUTE KILLER OF 13

Texas Slayer Goes to Death in Electric Chair.

By United Press
HUNTSVILLE, Tex., Feb. 10.—George J. Hassell, confessed slayer of thirteen persons, died in the electric chair at Texas State Prison here today.

Hassell was strapped in the chair at 12:23 a. m. and pronounced dead at 12:29.

A few minutes later Robert Lee Benton, Negro, was executed for the murder of D. E. Morgan, farmer. Hassell was executed for the murder Dec. 24, 1926, of his stepson. He also confessed the murder of his wife and six other step-children, and of five persons in Georgia.

'CANNON BALL' BAKER SHOWS IT CAN BE DONE, WITH FALCON KNIGHT

BY "SWEDE" SWANSON

"CANNON BALL" BAKER is at it again. "Cannon Ball" is the name he is always looking for the possible in automobile performance, and when something is declared as such, Baker immediately looks for the car that can do it; then he goes out and proves it can be done.

Such was the case last Wednesday night. "Cannon Ball" selected a stock Falcon Knight sedan for the test, and here is its record. This car, weighing 2,885

pounds, motor 215-16x3½, sleeve valve, with five passengers pulled, in second gear, another car with a wheelbase of 136 inches carrying four passengers from Martinsville to Indianapolis.

The total weight was 9,022 pounds. The distance covered was 27.4 miles, and the run was made in 44 minutes, 7 seconds, or an average of 37.24 miles an hour.

Ten people witnessed the event. In the Falcon Knight with Baker were Gene Barth of the Indian-

apolis Star, J. L. Mannix of the Indianapolis News, "Swe" Swanson, automobile editor of The Indianapolis Times, timekeeper, and Frank Girard. In the towed car were Murray Parker, Ray Tibbs, Shirley Murphy, and G. S. Butcher.

At the city limits of Martinsville the heavy car was made fast to the Falcon Knight by means of a bar arrangement; the motor was started and the long

run in second was made from a standing start.

The Falcon picked up speed until 40 was registered on the speedometer; at this point a long hill was reached and the little Knight pulled hard and cleared the top at 19 miles an hour. From this point on the speed never was less than 25 miles, and at times reached a maximum of 45 miles an hour. A total of six long or steep hills was crossed during the trip and never once did the little sleeve-valve car falter.

As the flying Knight crossed the city limits of Indianapolis, a distance of 27.4 miles had been covered in exactly 44 minutes, 7 seconds, an average for the run of 37.24 miles an hour.

DURING the run the motor turned over at an average of 4,064 R. P. M. and at times was running at 4,904 R. P. M. With this terrific speed the heat of the car never was more than 130 degrees and oil pressure stood

at 33 at all times. After the towed car had been disconnected, Baker shifted from second to high and the car performed in its usual smooth way.

At the conclusion of the race, the witnesses were high in their praise of the little Falcon Knight that could, without special gear equipment, make such a notable record. "Cannon Ball" Baker said that never before in the long years of stunt driving and car testing had he ever given a car such a grueling test.