## **Development and Introduction** of the Ford V-8

## By Dave Cole

The following is an excerpt from an in-depth article by Ford Historian and Author Dave Cole that appeared in the March/April 1982 V-8 TIMES on the occasion of the 50th Anniversary of the 1932 Fords. The article described the history of the Ford Motor Company from the Model T, Model A and the development and introduction of the Ford V-8 engine, the 1932 Model Fords and their impact on the automotive industry. Additional era Ford factory photographs have been added to enhance this important piece of Ford history. -Jerry Windle, Editor

Seventy-five years ago this spring. on Thursday, March 31, 1932, Henry Ford presented his new V-Eight cylinder automobile to an anxiously awaiting public, and thereby began a whole new chapter in automotive history.

ord's mainstay had always been a simple, basic automobile offered at prices that the average citizen could afford. At the beginning of the 20th Century, when the auto industry got underway, most manufacturers were intent on making the most of the horseless carriage craze; only the well-to-do could afford these self-propelled machines, and little thought was given to building cars for the common man . . . except by Henry Ford.

But for the first few years of his automotive career, he was constrained by his wealthy stockholders to build the kinds of cars that they wanted, and it was not until 1908, when he bought out some of his backers and took control of his company, that he was able to build the kind of car that

he saw the public needed.

That car, of course, was the Model T. With that cheap, strong, fast, simple little flivver. Henry Ford, more than anyone else, put the nation, and the world, on wheels. By developing the means to mass-produce his cars, he could lower their price and make them available to just about anyone who wanted one.

In just a few short years, his Model T's had blanketed the earth by the millions, his name had become a household word, and his fortune had grown to an incredible size. By 1919, Ford was

producing over a third of the auto industry's output; by 1921, well over half the cars built in the United States were Ford Model T's. In 1925, the automotive industry completed its 25,000,000th vehicle, and Model T serial numbers, which had begun in 1908 with 1, reached 12,990,055. Half of the cars in the country were Fords; half were all

other makes put together.

Naturally enough, a success story like Ford's encouraged imitators, but Ford had little serious competition from rival manufacturers of lowpriced cars until the mid-20's. The most successful of these was Chevrolet, a brash upstart from that huge conglomerate, General Motors, which pushed the Chevy from its modest beginnings just prior to World War I to a position that actually looked like a threat to Ford's supremacy just ten or twelve years later. Chevrolet's tactics were to offer mechanical improvements nearly every year, while keeping the price as low as possible, and with GM's vast resources behind them, they could do it. Ford's response to that was to step up production and cut his price still further. With his incredible success behind him, why should he change tactics?

If Henry could see no reason to change, others in his company could. His son, Edsel, president of the family firm, and other influential Ford lieutenants, could see that Ford would lose his dominant position in the industry if improvements were not made in the cars, but Henry remained reluctant. He did permit some modest restyling in 1926, however-new paint colors and a few modern features on updated body styles-but mechanically the '26 models were virtually identical to the

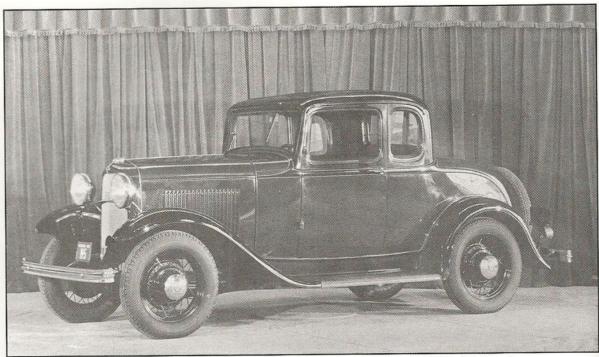
car introduced in 1908.

But the car that was progressive, innovative, and modern in 1908 was simply obsolete by 1926. The rest of the auto industry had matured and improved their products, and Ford's had remained essentially the same. Ford sales in '26 and '27 were due more to customer loyalty, maker's reputation, and low price, than to anything else.

By mid-1927, that clearly was not enough. Ford reluctantly discontinued the Model T on May 26th of that year, after over fifteen million of those cars had been built, and shut down the facto-

ry to switch over to a new model.

This proved time-consuming and agonizing for Ford, despite having been the pioneer in developing mass production techniques, had virtually no experience in changing over to a new model. For six months, the factory produced no cars, while all efforts were bent toward designing and building the new Ford. Chevrolet and the lesser



1932 Ford V-8 Five-Window Coupe

low-priced makes had the field all to themselves.

This was something new to the motoring public, accustomed as it was to the continuum of almost twenty years' duration, in which the Ford Model T formed the backbone of the automobile industry. For the first time that anyone could remember, Ford was out of production, and, naturally, public curiosity as to what Henry Ford would do rose rapidly.

The press, anxious for any story about Ford's plans, had next to nothing to go on, save rumors and imagination, until August, when Edsel Ford announced that the new Model A was underway, and would be produced as soon as possible. No details were forthcoming, but just the hint of a new Ford set everyone to speculating, guessing, forecasting, and wondering. Henry might not have planned it that way, but by making only the most perfunctory announcement of the coming Model A, he aroused almost insatiable curiosity among the public and press alike, which increased daily until December 2, 1927, when the new Ford was finally unveiled to the public.

Millions jammed the Ford showrooms around the country to get a glimpse of the replacement to the Model T, and, although production was slow getting up to volume on the new Model A, Ford was back at the top of the auto industry by 1929, outbuilding and outselling all other competitors.

In that year, two events occurred that would have dramatic impact on the auto industry and on Ford's dominant position in it. The first of these was the introduction of a 6-cylinder engine by rival Chevrolet. By abandoning the 4-cylinder engine and concentrating on an overhead-valve 6,

Chevrolet signaled the beginning of the end of four-cylinder dominance in the auto industry-and it would be almost fifty years before that basic engine type would re-emerge as important in the U.S. auto industry. Chevy, by abandoning the 4, left Ford and a new competitor, Plymouth, to ponder their next moves.

The second event of 1929 was of even greater significance than the Chevy 6, involving not only the entire auto industry, but the economy of the nation, and, ultimately, of the entire world. That was the stock market crash that came in October of that year, of course. The unbounded good times that had come to characterize the '20s, with reckless growth and speculation, stock market manipulation, over-extension of credit, and all the rest of it, all came to an end at the same time as the decade ended. Once people's faith in the stock market vanished, the whole downward spiral of depression took over, unemployment rose, banks foreclosed on mortgages, fortunes dwindled or vanished, and business in general, auto business in particular, went into a prolonged decline from which it was not to recover completely for years. The Depression was on, with a capital D.

Chevrolet, having gone to a 6-cylinder engine before the crash, appeared to be set for a while, but Ford, competing with a 4-cylinder car, was caught short. Nevertheless, Ford's Model A continued to outsell the Chevrolet throughout 1930, but as time went on and the Depression worsened, Chevy began to pull ahead. And throughout the early months of 1931, with the economy continuing to decline, Ford watched as their sales dropped dramatically, while Chevy's losses were

much more modest. People, it seemed, were telling Ford that the days of the 4-cylinder car were over at last. Both cars offered tremendous value for the money, but more buyers would opt for a smooth 6 instead of a vibrating 4, if prices were about the same.

Long before Ford ever acknowledged the problem publicly, the press began to recognize it, and to speculate, once again, on what Ford would do. Henry Ford contended that he did not care what Chevrolet did, but the press could see that, care or not, he would have to make some countermove, or his share of the market would continue to decline, and he would go out of business if that kept up. That would be unthinkable . . . or would it? Henry Ford and a few close relatives owned the company outright by that time, and with no one to give the company its direction and tone but Henry Ford himself, he could certainly drive the whole enterprise into the ground if he chose to.

No one expected that he would actually do that, but then, what would he do? In late 1930, the press began to pick up rumors of Ford's plans. From all indications, Henry planned to come out with an 8-cylinder engine! An article in the January 7, 1931, issue of BUSINESS WEEK magazine was typical. Headline, "Again, Ford Plays Dark Horse to the Automobile Industry." BUSI-NESS WEEK declared that "1931 strategy will turn largely on what he does with that 'Model 8'," noting that industry observers were expecting an 8-cylinder car in the medium-price field as Ford's next offering. "Detroit seems sure that there will be a new Ford 8; that it will be built in the now idle Highland Park plant . . .," BUSINESS WEEK continued, concluding that "there are indications that the Ford organization is somewhat disturbed by the inroads being made by the new Chevrolet, but no major changes are expected to be made in the Model A."

A story by Associated Press next took a swing at the Ford 8 rumors. In a release dated February 10, 1931, AP related that "an official of the Ford Motor Company, referring to the recurring . . . rumor that the company is working on an 8-cylinder model, remarked today that several hundred projects are being and have been worked on in the experimental plant. 'If we were to make an announcement for every experiment,' he said, 'we would be making one every three or four minutes!" "Despite that response, AP noted that "in automotive circles . . . the ultimate appearance of a Ford eight cylinder car has been accepted as almost a certainty."

BUSINESS WEEK was back in the May 13 issue with another slant on the story. Noting that Chevrolet sales were leading Ford's for the fourth straight month, BUSINESS WEEK asked, "What is Mr. Ford going to do about it? Ford success in the past has been based upon two principles: he has always made the lowest priced car; he has

## 8-CYLINDER FORD

## But Official Says Experiments Mean Nothing

(By Associated Press)

DETROIT, Feb. 10 .- An official of the Ford Motor Company, referring to the recurring New York rumor that the company is working on an eight cylinder model, remarked today that several hundred projects are being and have been worked on in the experimental plant.

"If we were to make an announcement for every experi-"we' would be ment," he said, making one every three or four minutes. Whenever it is finally decided to put anything into production, we make an announcement as quickly as possible because we want all the publicity we can get in that event."

The official remarked that some years ago Mr. Ford put \$2,000,000 into an experiment plant and that "naturally he expects its employes to keep busy."

In automotive circles here the ultimate appearance of a Ford eight cylinder car has been accepted as almost a certainty. At the same time it has been pointed out that Henry Ford might change his plans over night and scrap any idea he may at present hold to bring out such a car.

made but one model at a time. Can he continue these principles and still meet aggressive Chevrolet competition?"

The magazine noted that Ford engineers had been hard at work on an 8, but Edsel Ford had dogmatically said the Model A would be continued, period. The latest scuttlebutt, though, indicated that the new Ford would offer a four or an eight-cylinder engine, interchangeably, in the same basic chassis. "Psychologically," the story said, "the new car would still be the Model A, it would still be the lowest price 4 or 8 on the market; it could pass readily as a single model, thus

fulfilling all the Ford principles."

In June, the NEW YORK TIMES came out with a story claiming that "The Ford Motor Company is planning construction of a new model automobile with an eight-cylinder V-shaped diesel engine for the fall trade . . . ." but a companion article asserted that diesels for passenger cars were highly impractical at the time. Ford offered no comment on that, one way or the other.

Where had all these stories come from, anyway? Was it just idle speculation? No, there was something to it. The press, then as now, was very adept at ferreting out information on interesting subjects, and an eight-cylinder Ford was a very

interesting subject indeed.

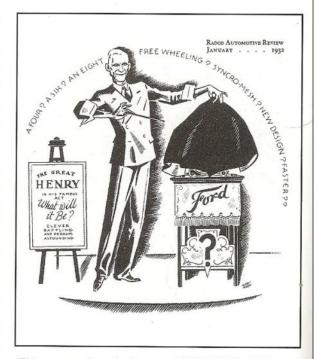
Some observers recalled that, even before the Model A was introduced, Henry Ford's dream was to replace the old Model T with an eight-cylinder engine; an X-8, a strange looking layout be devised, built like two four-cylinder radial engines in tandem on a common crankshaft. When engineering difficulties with that engine precluded using it to power the Model A, Ford had reluctantly ordered the building of a thoroughly conventional 4-cylinder engine for that car. But that wasn't what he really wanted.

Now, in 1931, a 6-cylinder looked like a reasonable choice for the new Ford, but Henry wouldn't hear of it. For one thing, Chevrolet already had a six; if Ford followed suit, he would look like a copy cat. For a man accustomed to being the industry's leader, that was out of the question. But Henry's antipathy to the 6-cylinder

engine had deeper roots than that.

Back in 1906, he had actually produced a 6-the big Model K Ford - as one of the last of those cars that his early backers wanted to market, and he had never liked that car. It never ran right, to his way of thinking; it was too big, it didn't have enough to distinguish it from its competitors, it didn't sell well. Records show that Ford experimented with sixes along with V-8s, but only half-heartedly. No, there would be no Ford 6; at least, not now.

But an 8, well, that was different. Henry liked the 8. True enough, the X-8 had never been made to run right and had been laid aside, but how about a V-8? If Ford could build a V-8 at a low enough cost, it would be a real coup, as no one had ever managed to build a really successful V-8 for a low-priced car. Only big, prestigious cars had had lasting success with the V-8. Certainly a smooth, flexible, powerful Ford V-8 would give the Chevy 6 a run for its money! And Ford had had eight years of experience at building V-8s by that time anyway. Ford had bought out the Lincoln Motor Company in 1922, and every one of those big, beautiful expensive Lincolns had been powered by one of the best V-8s in the country. A Ford V-8 would be a natural family development.



This cartoon, from the January, 1932 RACKO AUTOMO-TIVE REVUE, expressed the frustration of millions of Henry-watchers as they awaited Ford's 1932 plans.

In 1930, Henry set teams of engineers to work on V-8s, developing different ideas he had for V-8 engines. One of these, a 3-5/8-inch x 3-5/8-inch V-8 with 299 cubic inches of displacement, was started in May of that year under the direction of Arnold Soth. Henry wanted it built without an oil pump, so Soth tried that. The flywheel threw oil to a tank in the valve chamber, whence it ran by gravity flow to the bearings, but the set-up never worked; the engines burnt out.

Another V-8 of the same size was started in November 1930, by another engineer, Carl Schultz. Another design, begun at the same time, was designated as the Model 24, with a 3-3/8-inch bore and 3-1 /4-inch stroke, giving 232 1/2 cubic inches. It was designed for a proposed car with a 112-inch wheelbase, according to the Reminiscences of Laurence Sheldrick, Ford's chief engineer, and four of these engines were built and tested in disguised Model A's during the winter of 1930-31, running between Dearborn and Ford's

winter home in Macon, Georgia.

With all these engines, the real designer was Henry Ford himself. The engineers who worked on them were really development engineers, taking Henry's ideas and trying to make them work. They were not allowed to design the engines or components on their own, and some of them were considerably frustrated by the constraints within which they worked. But they all knew that it was Henry Ford for whom they worked, and that Henry was the one who would call all the shots, right or wrong.

11 this activity was not lost upon the press. General circulation newspapers and magazines had considerable interest in what Ford did, and the publications serving the auto

industry had even more concern. way One they another, were able to discover and report at least the basic thrust of Henry's plans at nearly every turn. Thus, throughout the early months of 1931, those stories kept popping up about the 8cylinder engine that Henry Ford was working on. But Ford himself never said anything about it.

During the summer of 1931, the stories about the Ford 8 trailed off and stopped. Henry, it ap-peared, had put the V-8 idea back on the shelf and was concentratmore on pressing business, the development of an entirely new

chassis and body design for the upcoming 1932 models. The auto shows, in which the new models from all auto manufacturers were presented to the public, would begin right after the first of the year, and certainly Ford would want to have his '32 model ready by that time.

BUSINESS WEEK continued to track Ford's progress, and, to them, it looked like he was right on schedule. In the September 16, 1931 issue, they stated flatly that "The Ford Motor Company will make at least 50,000 more of its present line of Model A cars before it changes over to production of the revamped models . . . The car on which Mr. Ford will pin his 1932 hopes will not begin until sometime in October, possibly not until Nov. 1.... It would be a typical example of his sense of showmanship to time the debut of the new model to coincide with the New York automobile show. When it comes; competitors expect to find considerable attention given to the elimination of vibration-Plymouth's new selling point. They also expect a 4-inch longer wheelbase and bigger body."

But notice that they did not expect the V-8 engine any longer.

Other magazines and newspapers continued to report rumors that Ford's new car was just around

the corner. Some

of them had got-

ten wind of a few

of the anticipated

features, like the

rear-mounted gas

tank and longer

wheelbase, and

most of them

wheeling or an

automatic clutch,

along with some

device to limit

engine vibration,

but it was the tim-

of

that was most

The Model A

announcement

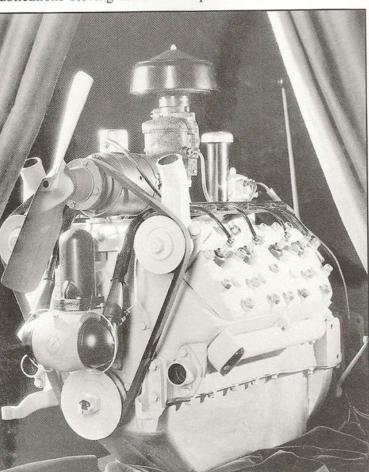
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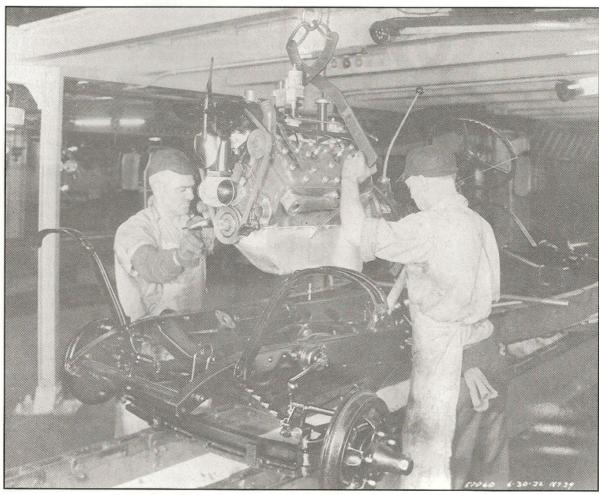
The revolutionary Ford V-8 engine, introduced in 1932.

engine, by midautumn, had gone out of production, and the Model A's being assembled were using up the parts on hand. Thousands of former Ford workers were now unemployed, adding new woes to the worsening

Depression. The press remarked that, once Ford's new model got underway, and people went back to work to build it, confidence in the auto industry would certainly take a turn for the better. As it was, with the giant of the industry just coasting in neutral, the magnitude of the Depression was approaching alarming and tragic proportions.

Show time was drawing near when BUSI-NESS WEEK announced in its December 16, 1931, issue that the new Ford had gone into production. Things appeared to them to be still on schedule. Ford, they said, would build 25,000 cars in December, and a hundred thousand in January.

BUSINESS WEEK was only partly right that time. Ford had indeed gone into production on the improved 4-cylinder engine, during the last week in November. It was a further development of the tried and true Model A, reworked to put out 50 horsepower instead of 40, and provided with a fuel pump; thoroughly evolutionary in nature. And, many of Ford's suppliers, like Kelsey-Hayes and the Murray Body Company, had started pro-



Assembly workers "drop" a V-8 engine into the 1932 chassis.

ducing and delivering parts for the new Ford. But, alas, that production schedule was not to be.

Those periodicals that covered the automobile industry had the real scoop this time. Publications like AUTOMOTIVE DAILY NEWS, printed each weekday in New York since 1926 and covering the whole auto industry from manufacturing to retail sales, and AUTOMOTIVE INDUSTRIES, a weekly Chilton Company magazine published in Philadelphia to cover the activities within the auto manufacturing world, had the big story. "Make an 8, says Ford," ran the headline in the December 19 issue of AUTOMOTIVE INDUSTRIES.

The story, datelined Detroit, December 17, continued, "AUTOMOTIVE INDUSTRIES has received confirmation which, while not official, is nevertheless definite, that Ford Motor Company is discontinuing the manufacture of its 4-cylinder automobiles and is rushing work on the new Eight for possible presentation around show time. The release of production orders to parts suppliers about two weeks ago for parts on the Model B four-cylinder engine was followed within only a few days by orders cancelling all deliveries for the time being on most parts. This gave rise to rumors

that production difficulties were being encountered and that consideration was being given to offering an eight-cylinder engine optionally on the Ford passenger car chassis." "

The expectation was that Ford would be able to have the V-8 ready by show time, as much experimental work on the V-8 had already been done, and Ford was supposedly anxious to get into production as quickly as possible.

The general press was not long in picking up this latest development. BUSINESS WEEK called Ford's hasty turnaround "an astonishing move," and it was certainly all of that, but still there was no official word from Ford as to what was really going on. Henry was still maintaining the same stance as he had in an interview reported in the November, 1931, issue of THE AMERI-CAN AUTOMOBILE (Overseas Edition). In response to their question, "Will you make any statement as to the Ford Motor Company, or its future plans?" Mr. Ford had replied, "The Ford Motor Company is busily working, as usual, for the improvement of the automobile." Period!

In a few weeks, Christmas 1931 came and went, then New Year's Day, 1932. And with the new year came the automobile shows, starting with the prestigious National Auto Show in New York City's Grand Central Palace, from January 9

to 16; then shows in most other major cities in the remaining weeks of January and February.

In those days, the National Auto Show was always held right after the first of the year, as it had been since 1900, and it marked the official start of the new selling season. Not until 1935 was new-model introduction time moved back to late fall.

For the 1932 season, several makes, desperate for publicity and sales, had brought out new models in late 1931, but most had reserved their latest cars for the New York show. Ford usually stayed away from the National Show, but scheduled his own elsewhere in Manhattan, so that it overlapped the other ...but in 1932, there was no Ford show. TIME magazine commented on this in their January 18 issue, fully expecting that the Ford would make an appearance at the Philadelphia Auto Show, scheduled to open that day.

On the third day of the New York Auto Show, AUTOMOTIVE DAILY NEWS ran an editorial entitled, "Chevrolet and Ford."

"As not infrequently happens, some of the most interesting speculation in the auto industry centers around Ford and Chevrolet. What are these two production giants of our industry going to do in the months that lie just ahead?" they asked.

For the first time in history, they noted, Ford in full production had been beaten at his own game. Figures for the first eleven months of 1931 showed Chevrolet with 555,548 passenger cars against Ford's 512,365. Not too great a disparity, perhaps, except when contrasted with the same period for 1930, when the score read Chevrolet, 587,292; Ford, 1,025,454.

Of course, Ford sales had taken a drubbing during the change-over from Model T to Model A, because Ford was shut down for six months, but both Chevrolet and Ford were in full production throughout 1931, and Chevrolet had taken the lead. ADN recapped the story that Ford was supposed to have presented the Revised Model A, as

they called it, in time for the New York Show, reported the switch in Ford's plans, but noted that, so far, the Ford 8 was all rumors. They also questioned whether Ford could really build an acceptable V-8, for, after all, Ford's experience lay with four-cylinder engines.

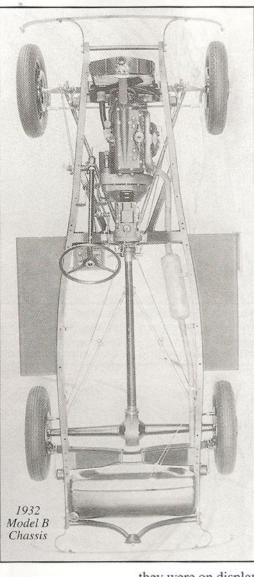
Whatever the case, it was pretty obvious to them that Ford would not be bringing out the 8 until March or April, so that Chevrolet, Plymouth, and the lesser low priced makes would have the market all to themselves during the first quarter of 1932. ADN concluded by citing industry observers who figured that Ford should bring out the Revised Model A, with Floating Power or whatever was going to damp out the vibrations, along with price cuts, in order to get his share of the 1932 market, and let the V-8 appear only when it was ready. In retrospect, it seems that would have been a better course of action, but Ford did no such thing.

Ford's dealers were really feeling the pinch. Dealers for all other makes had new models to sell, and

they were on display at the show in New York, but Ford dealers were still trying to unload last year's Model A's, and they had no better idea than anyone else as to when the '32s would appear. In response to the ADN editorial, one Ford dealer wrote to the paper to express his concern along this line, and concluded with a little poem:

> "Four or an eight? Four or an eight? Will Ford bring out something Before it's too late?

Five or a seven, (And that's a joke), Will Ford make his new car Before I go broke?"





1932 Ford V-8s near the end of the assembly line. They would revolutionize the automobile industry.

Certainly many another Ford dealers could have uttered the same sentiments.

he new Ford did not appear at the Philadelphia Auto Show, and on January 26, AUTOMOTIVE DAILY NEWS noted, "New

Ford Fails to Put in Appearance at Detroit's Show," which opened January 23. It had been expected there up to the last minute; now the rumor was that it would not appear until March 1st.

In early February, Ford announced a new car-but it was not the long awaited V-8. It was a small four-cylinder car designed for sale in the British market, in competition with the Austin 7, the Morris, and some other small cars that had recently appeared in England. The little car was called the Ford 8, the 8 referring to the taxable horsepower rating, not to the number of cylinders, nor to the brake horsepower. Americans, anxiously awaiting the new Fords, must have been

The March 1932 issue of FORD NEWS, puzzled by the appearance of a the magazine that the Ford Motor Company published for its employees, dealers, and customers finally told them and the world what Henry Ford's plans were for the 1932 Model - the V-8 engine!

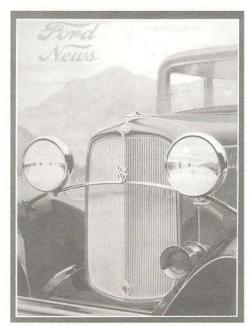
that were printed did give U.S. readers an idea of the lines that the big new Fords would have-if they ever came out!

During the second week in February 1932, Henry Ford and his wife, Clara, were entertained at the White House by President Herbert Hoover,

along with Walter P. Chrysler and other tycoons of American business. At about the same time, the U.S. Treasury Department made known the fact that about 1 1/2 billion dollars, fully a quarter of all U.S. currency, was in hiding in safety deposit boxes, sugar bowls, mattresses, or other hiding places-but not held in bank deposits, where banks could make loans with it.

Public confidence in banks had grown mighty slim, as hundreds of them had failed after two years of Depression; people had responded by hoarding their money elsewhere, to avoid losing it. With the country still on the gold standard, the

hoarding of cash immobilized the gold behind it, and strangled national credit. Certainly one of the topics that Mr. Hoover discussed with Mr.



little tiny Ford 8 which was

neither the Ford nor the 8 they

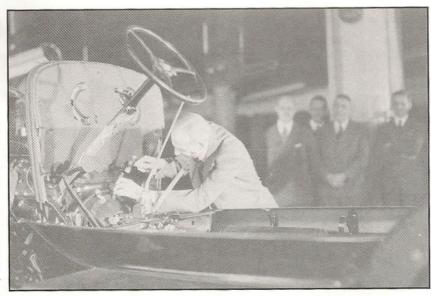
were expecting, but the photos

Ford and the others over dinner was, what can you gentlemen do to increase confidence in business, and what can you do to encourage people to spend some of their hoarded cash?

Henry Ford went back to Dearborn after the dinner with Hoover and straightaway granted an exclusive interview with James Sweinhart of the DETROIT NEWS. The resulting article, published on February 11, 1932, disclosed all of Ford's plans, recapitulating the activities relating to the development of the V-8 over the previous two years, and

promising to get industry moving again.

At last! An official announcement from Ford! The article was carried by all the press associations to newspapers throughout the country, and within a few days, the story, or extracts from it, had appeared in practically every newspaper in America. The full text of the article was also



As Ford Motor Company officials look on, Henry Ford stamps the serial number on the first Ford V-8 on the assembly line.

reprinted in the March 1932 issue of FORD NEWS, the magazine that the Ford Motor Company published for its employees, dealers, and customers. Now everyone knew.