

**N**EXT time you are in a food store pause and look admiringly at the meat and dairy counter. Bound up in the glass and chromium cases there is a story of science triumphant, as glowing as anything that ever issued from a laboratory. The parsley-decorated steaks are probably tender. Just luck, you may think. A far more likely explanation is that those steaks were well born, their fathers being able to trace their ancestry back farther than any Mayflower descendant.

The lamb chops are cheap enough to indicate plenty. This is another way of saying that sheep diseases have been held in check. The pork shoulders are almost surely free of trichinae, the ugly little eels that embed themselves in man's muscles, and the milk is happily uncontaminated with *Brucella abortus*, the micro-organism that gives human beings that frightfully debilitating disease, undulant fever.

For making these things so, you can thank a doughty little band of cow, sheep and hog doctors who have put on a magnificently co-ordinated campaign to make the United States the safest place in the world for a farm animal. The odds against them have been terrific. Congress at times has refused

them the money they so desperately needed. Farmers have been obstructive, sometimes even to the point of getting out the squirrel gun.

Still, the campaign is a winning one.

Men from the Bureau of Animal Industry can't go about asking cows and hogs how they feel—can't, that is, and expect to get very good results. They have to rely on external signs and on tests that are masterfully delicate. Any veterinary can—and will—tell you that in his profession a man has to be a better diagnostician than any medical doctor. One world-famous clinic admits this. Its chief diagnostician is a vet.

#### A New Terror

The biggest job the bureau men have at the moment is stamping out a new terror. It is called Bang's disease. It is transmissible from animal to man via cow's milk. And there is, apparently, one way only to stamp it out: slaughter.

The wail that arose from farmers when the bureau began eradicating bovine tuberculosis by killing infected cows is again reaching a high pitch. Why go to school, you scientific fellows, if all you learn to do is kill? Why don't you find a way to prevent, a way to cure? It is hard

to find an answer to these logical complaints. "We are trying," sounds helplessly weak and ineffectual. Yet ground is being made. Let us see.

Bang's disease makes one of the greatest tapestries of scientific work yet produced. The job covers a triangular patch of the globe, points being Denmark, the Island of Malta in the Mediterranean and the Department of Agriculture in Washington. Working at Malta in 1887, David Bruce, a British army doctor, found in goat's milk the rod-shaped microbes that were killing off islanders with a crazy cyclical fever that would go sky-high, then drop to normal, in a few hours' time. The sickness was called Malta fever.

In 1900, in Denmark, an investigator named Bang found a similar microbe that was devastating the dairy herds of his country, causing them to lose their calves after only a few months of development. In 1921 a Department of Agriculture investigator, Dr. Alice Evans, put these two discoveries together and found that to all intents and purposes the microbes were alike; that in cows they caused infectious abortion, and in man undulant or Malta fever. And that man could get this disease from cow's milk as well as from goat's milk.

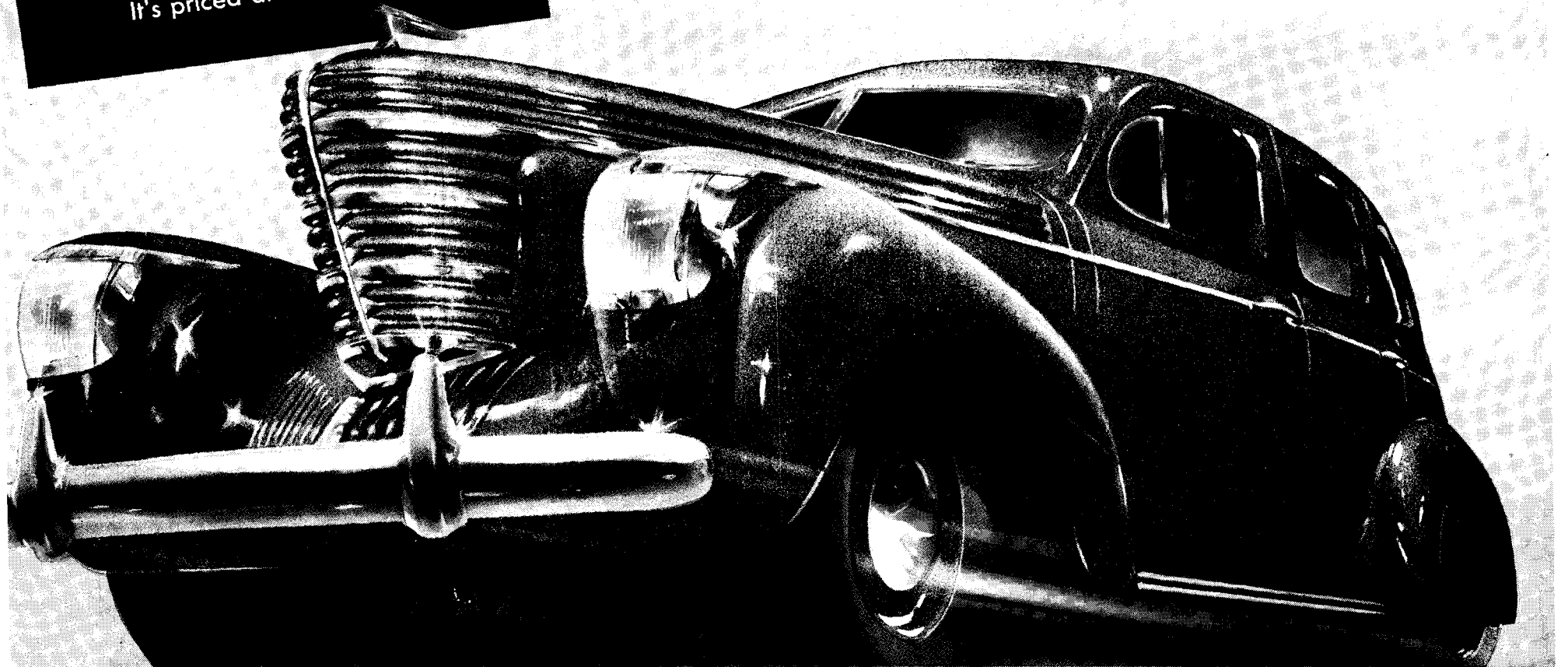
GLOBE





# New 1939 Graham again sets the pace for streamlined styling!

LIKE THIS SPECTACULAR NEW GRAHAM, OUT TODAY, most 1939 cars have sleeker streamlined bodies...wider tread...lower center of gravity...fender headlights. See Graham today—the foremost expression of modern streamline design. It's priced at only \$965!\*



ON DISPLAY AT NATIONAL AUTOMOBILE SHOW, GRAND CENTRAL PALACE, NEW YORK, OPENING NOVEMBER 11, 1938

*But regardless of exterior design...*  
ALL OF THE NEW CARS WILL AGAIN  
BE DIVIDED INTO 2 CLASSES—



Most cars in a given price class will LOOK pretty much alike. Graham—the only American car offering a *Supercharged engine*—again stands alone as the one new and different driving "thrill" left to the buyer who is fed up with ordinary automobiles!

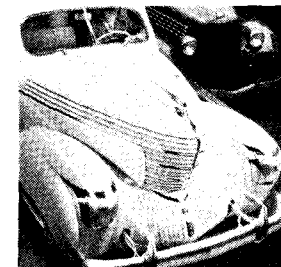
1939 **GRAHAM** \$965

\* 4-DOOR SEDAN WITH TRUNK Combination Coupe \$940, 2-door Sedan \$940, delivered in Detroit completely equipped including federal tax and all standard accessories. Only freight, state and local taxes (if any) to be added.  
**SUPERCHARGER MODELS AT ADDITIONAL COST.**

WHAT A SUPERCHARGER IS AND WHAT IT DOES  
IN MAKING AN ADVENTURE AGAIN



**BURNS MORE AIR—LESS GASOLINE!** The Supercharger is an engineering miracle, pioneered five years ago by Graham. Proved in more than 100 million miles of owner operation! A Supercharger breaks gasoline into a fine, misty vapor. Mixes it with air under pressure. Then forces evenly into the cylinders a "leaner" mixture of far greater efficiency.



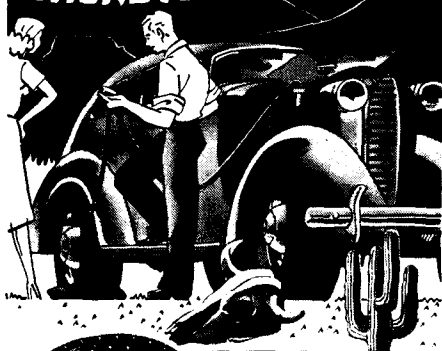
**UNBELIEVABLE PICK-UP SPEED, PERFORMANCE!** The acceleration and pick-up of a Supercharged engine is simply amazing. Even at 50 m.p.h. and up, where ordinary engines become sluggish, Graham pick-up is astonishingly fast! You get instant response at all speeds...pass other cars more safely because you get back in line more quickly.



**OFFICIAL A. A. A. ECONOMY CHAMPION!** You'd expect a car as big as this to cost more to run. But it's the Official A. A. A. Economy Champion for the third successive year! In the Gilmore-Yosemite Economy Sweepstakes, in competition with other stock cars of all popular makes, Graham, in 1938, established the economy record—25.77 miles per gallon!



## TIRE AIR SERVICE WHEREVER YOU ARE



When you need air far from a service station, the Schrader Pump will supply it right from your motor. You simply remove a spark plug, connect the Pump and let the motor do the work. Provides an unlimited supply of clean, cool air for tires, air mattresses, boats and pressure tanks. A real time and labor saver. Order from your automotive or tire dealer, or write to us direct giving your dealer's name. Price, with pressure indicator, \$4.50; without, \$2.75 (U. S. A.)



When you have a flat tire, have the old valve parts replaced with new Schrader Cap and Core. Their cost is very small and they make the valve like new.

These free booklets, "Tire Air Service Wherever You Are" and "Balance Your Tires", tell about the Pump and other Schrader Products that will help you save money. Write for them today.

A. SCHRADER'S SON, Box 240 G. P. O., BROOKLYN, N. Y.  
Division of Scovill Manufacturing Company, Incorporated

## Schrader

For shaving, Ingram's is the tops,  
Where it begins, discomfort stops.

—RUSSELL RAMSEY, DEL.



THE THRIFTIEST PINCH of Ingram's foams up into billowing brushfuls of luxury lather. And it's cool, Cool, COOL! Get economical Ingram's at your druggist's today.

INGRAM'S SHAVING CREAM

BECOME AN EXPERT

## ACCOUNTANT

Executive Accountants and C. P. A.'s earn \$2,000 to \$10,000 a year. Thousands of firms need them. Only 17,000 Certified Public Accountants in the U. S. We train you thoroughly at home in spare time for C. P. A. examinations or executive accounting positions. Previous experience unnecessary. Personal training under supervision of staff of C. P. A.'s, including members of the American Institute of Accountants. Write for free book, "Accountancy, the Profession That Pays." LaSalle Extension University, Dept. 1140-HA, Chicago

A Correspondence Institution

## Ease Dryness, Coughs

## RASPY THROAT

DUE TO COLDS



If your throat's tormented with irritation, a Vicks Cough Drop dissolved naturally in your mouth will give the troubled membranes a soothing, medicated bath—for 12 to 15 minutes! Relief comes fast because Vicks are really medicated... medicated with the throat-soothing ingredients of Vicks VapoRub—famous for relieving coughs and discomforts of colds.

## MEDICATED VICKS COUGH DROPS

Don't think that bureau officials were hardhearted or dull-witted not to go to work on this disease as soon as this momentous discovery was made. Remember that at the time they were up to their necks in the campaign against bovine tuberculosis—one that was taking all their time, money and energy. So the eradication campaign against Bang's disease had to wait until 1934. Then money was made available for the inevitable slaughter that was to follow—money to recompense farmers partially for their losses.

Fortunately the field men were armed with a test that gave a positive answer as to whether a cow was infected. They simply jabbed a needle in a cow's neck, drew off half an ounce of blood, and let it clot. The colorless serum—the white portion of the blood—left in the tube held the answer. To this was added an antigen—a growth product of the germs—and from then on it was easy. After forty-eight hours in a nice, warm incubator the microbes—if the disease was present—bundled themselves up into little knots easily visible to the naked eye. If these little clumps were absent the cow was all right. If they were present that meant one less cow in the United States—and tears from the farmer's wife when bossy was hauled away.

At present hundreds of men are in the field, men who are running about 700,000 tests a month. Four crews of seven each are touring in beautifully compact, efficient trailer laboratories. They park in a central location, then five men start collecting blood and tagging cows while two men stay behind to juggle test tubes.

So much for the destructive side of the work. While this has gone on, a big giant of a man with a mop of white hair has stayed behind in a laboratory at the National Agricultural Research Center at Beltsville, Md. Dr. John M. Buck drew the assignment of finding a vaccine that would protect cows and allow them to have normal, healthy calves no matter how contaminated their barns or fields.

### A Hopeful Approach

He finally turned up one that looked promising—looked promising in a test tube. It had all the right elements in it and should protect cows. But would it? Old Doc Buck set out to discover. He pumped his vaccine into fourteen young heifers. Then he picked nine animals to act as controls—a control being an animal that would not get the juice that Buck hoped so desperately would protect. All twenty-three animals went to the breeding pens. Dr. Buck deliberately shot enough of the disease microbes into them to give them a full-blown case of Bang's disease. If the vaccine was any good at all it would have to wrestle with that stuff and tame it.

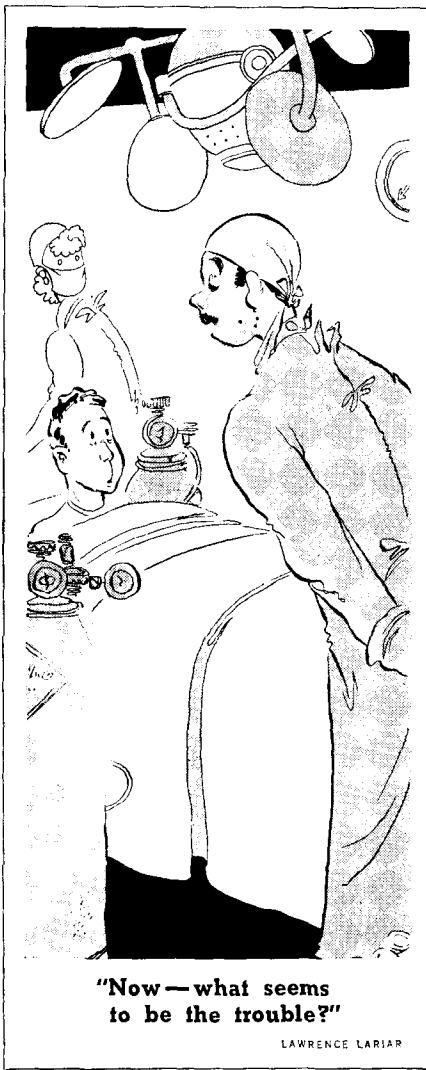
Within a few weeks the unvaccinated cows began losing their babies. Buck watched anxiously. He kept telephoning the animal sheds. How were the others doing? Fine, just fine, came the reply. He hovered about those cows. Every few weeks another unvaccinated cow would lose her calf, but nothing seemed to happen to the ones that had got his protective stew.

When it was all over the unvaccinated cows produced only three weak, spindly calves. Those that got Buck's protection delivered the expected fourteen, only one of which was weak!

Later work revealed undeniable flaws in the vaccine. It did not give 100-percent protection and it didn't seem to work on older cows. To be thoroughly trustworthy, it had to be shot into heifers four to six months old. Yet it represented the most hopeful approach to a problem that grows larger each day. Field results that are just now coming in would have delighted Dr. Buck, who died last year. Out of 5,621 vaccinated calves, only eight have aborted.

Don't think that this is the only problem confronting the men who try to see that we get all the good meat we can eat. Take the parasitic diseases: intestinal threadworms, liver flukes, trichinae, kidney worms. These pests, of the same general order as those that cause malaria in man, can kill meat animals as effectively as any bacteria.

Trichinosis—principally because of its public health aspect—is the most interesting disease. This one is caused by a minute worm called the trichina. Pork infested with these parasites can pass the disease along to man only if it is uncooked or poorly cooked. Hence the disease is largely confined to poor Southern blacks and whites who don't take all the care that they should with their cooking, and to Germans, Scandinavians and Italians who find raw pork a very acceptable dish if mixed with enough onions and vinegar. The worms thus eaten lay eggs in the intestine, and the hatched young pierce the intestinal wall, are picked up by the blood and carried to muscle tissue. Embedded in muscle, trichinae cause a kind of rheumatic pain and swelling. Severe infection often causes death.



"Now—what seems to be the trouble?"

LAWRENCE LARIER

Pigs almost invariably get this disease from garbage—from bits of uncooked pork trimmings that came from infested hogs. This disease would present no problem at all if it weren't for a new and growing seaboard industry: garbage feeding of hogs. An owner of such a piggery—one of which has 65,000 animals—will contract with a hotel, restaurant, or even a city for garbage. Then the vicious circle will begin. He will sell his trichinae-ridden meat, and trimmings will come back to infest his hogs.

Cases have turned up where one out of every ten hogs in one of these dismal establishments was infested with worms and in the usual course of things they have the disease five times as often as Western grain-fed hogs—the animals preferred by large packers.

The bureau has begged owners of these suburban hog ranches to cook

garbage—which will destroy the worms. They reply that the hogs don't like cooked garbage. Then bureau men have asked them at least to sort the scraps and boil the pork leavings. Too much trouble, the ranchers have replied. Since the United States hasn't seen fit to require them to give the public this protection—something that Canada has done—it is likely that this problem will be increasingly important. The most annoying feature of the whole business is that trichinosis could be completely eradicated if proper precautions were taken. But until this step is taken pork eaters can have at least one consolation. If they get the disease they have only themselves to blame. Proper cooking will prevent it.

Stamping out other parasitic diseases in hogs is largely a problem of sanitation. The solution, briefly stated, is this: keep pigs free of parasites for the first six weeks of their lives and they will then have resistance enough to throw off most invaders. How is this done? Simply by taking to the farrowing house lessons learned in the maternity ward.

The bureau advocates scrubbing the expectant sow with an antiseptic solution and then moving her into a thoroughly de-bugged pen. As soon as her young arrive they are moved by wagon—not allowed to walk along contaminated roads—to a fresh field, a field that was in crops the year before. Possibly this seems like much ado about a pig's confinement. But in cold, hard figures this procedure saved the state of Illinois a million dollars in a single year; the extra money coming from increased size of pigs and lowering of mortality rate.

### A Campaign That Got Results

The most heroic campaign the bureau has put on is against a disease for which there is no preventive—bovine tuberculosis. And there is no cure either, since you can't send a cow to Saranac, or Denver, or Albuquerque.

In 1917 about 32 out of every 1,000 cattle examined had tuberculosis. White nodules in their carcasses gave mute testimony to the presence of tuberculosis. At that time about 23,000 people died each year of bone and gland tuberculosis—the disease contracted principally from milk. Then came the campaign destined to bring howls from the farm population.

Inspectors—state as well as federal—marched into the farmyards, often over the owners' protests. But no matter how much objectors fought, reacting cows were pulled out of the herds, appraised, loaded on trucks and taken to the slaughterhouse. Altogether 3,700,000 animals have been disposed of since the campaign began.

This hardship on the farmer isn't as great as it appears. Last year, for example, destroyed cows had an average appraisal value of \$86. To offset this loss the farmer got an average salvage value from the carcass of \$29; and an average bounty from his state of \$12; and an average federal bounty of \$22. His loss, therefore, stood him only \$23.

The results of the campaign, the greatest systematic eradication program of its kind ever undertaken? In not a single year since the campaign began has the death rate from milk-borne tuberculosis failed to decline! Today it causes less than a quarter as many deaths as it did when the bureau began beating out the disease that people used to describe euphemistically as the captain of the men of death. And the incidence of tuberculosis in cows tested is only about a fifth of what it was when the work began. One beautiful feature of this job is that the disease will not return. Too many wise dairies have passed ordinances requiring dairies that furnish them milk to have "accredited"—tuberculosis-free—herds.



# The gift of 3 Wise men!



We held a heavy conference on mother's Christmas present. Bobby said it must be "smart." Dick said, "something she'll be proud of." And I said, "useful." So we decided to pool our money and really go to town.



After several hours in the store, Bobby pointed and yelled "Look!" Dick and I dashed after him, and there we stood before it, silent, yet unanimous that here was the gift that filled the bill for all three.



On Christmas morning, mother's delight and her three big thankful kisses told us that we had been three wise men in choosing a Toastmaster\* Hospitality Set. Friends dropped in that afternoon, and Mrs. Byrd said she simply must have one for her Sunday supper parties. Jim Paterson said it was a swell idea for his new game room. And mother just beamed and said there'd be no end to the ways she would use it.



They chose the new *De Luxe* Hospitality Set. And what a beauty it is! A stunning large tray of mahogany or walnut; four individual lap trays to match; a clever toast-trimmer; three appetizer dishes in exquisite Duncan crystal—and the automatic pop-up type Toastmaster toaster, newly styled and improved.

It's the "master mind" of toasters. Set the indicator for *your* kind of toast—and the Flexible Timer takes charge! It allows more time when the toaster is cold, less when it's hot. When both slices are toasted to a T, up they pop and off goes the current. No watching, no turning, no burning.

There's another beautiful Hospitality Set, with colorful Stangl peasant-pottery appetizer dishes; and a new Toast 'n Jam Set that's the talk of the town. See them all, wherever the best appliances are sold!

\*"TOASTMASTER" is a registered trademark of McGRAW ELECTRIC COMPANY, Toastmaster Products Division, Elgin, Illinois. European Sales Office: Frank V. Magrini, Ltd., Phoenix House, 19-23 Oxford St., London, W. 1, England.

## TOASTMASTER

REG. U. S. PAT. OFF.

### Hospitality Set

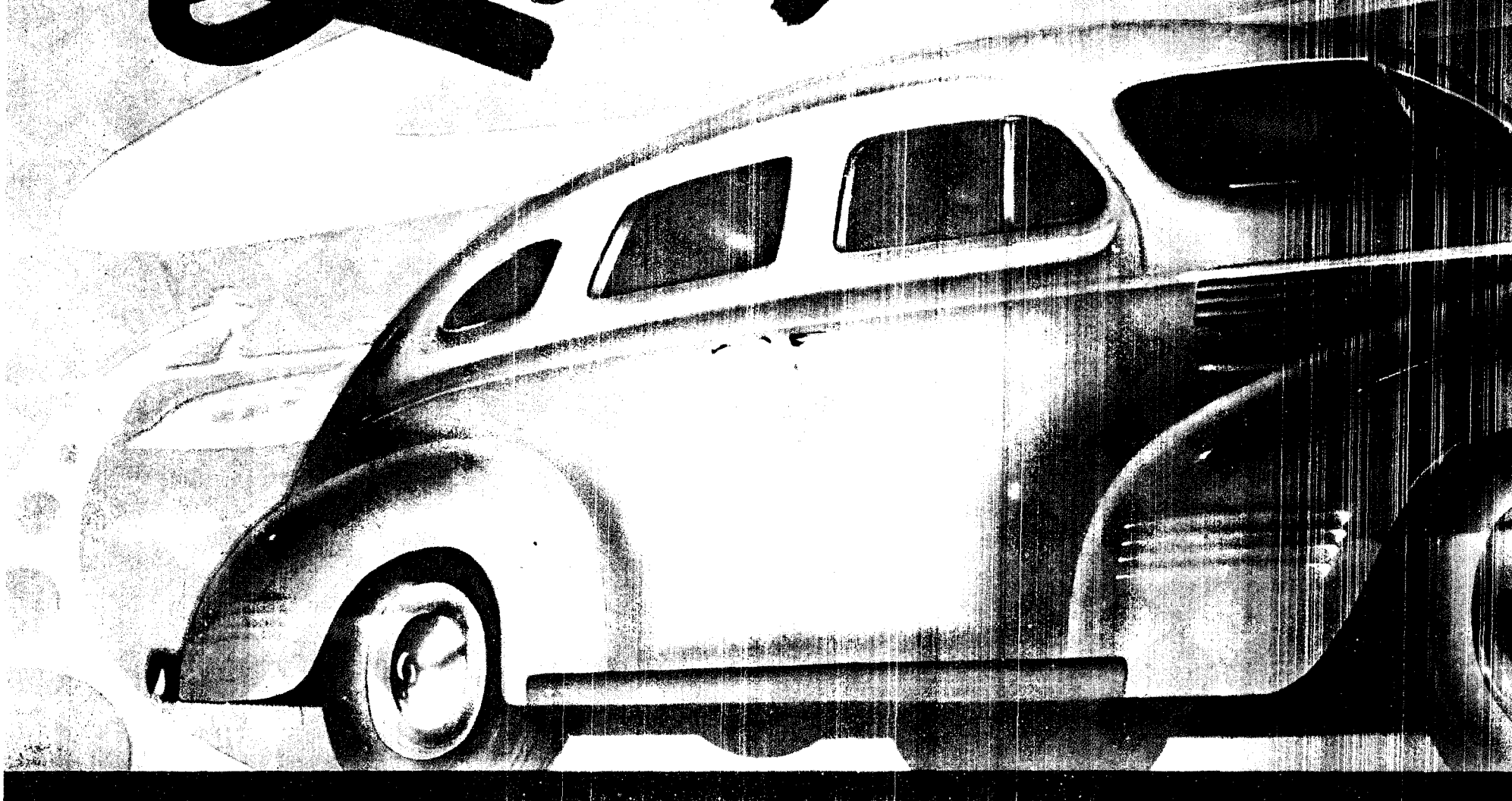
**JUST LIKE HOME**—Most good restaurants and hotels serve delicious toast made on Toastmaster Toasters.

TOASTMASTER PRODUCTS: 2-slice automatic pop up type toaster, \$16.00; 1-slice, \$10.50; Hospitality Sets, \$19.95, \$23.95; folding stand, \$5.95; Toast 'n Jam Set, \$17.95; Junior non automatic toaster, \$7.50; automatic waffle baker, \$12.50



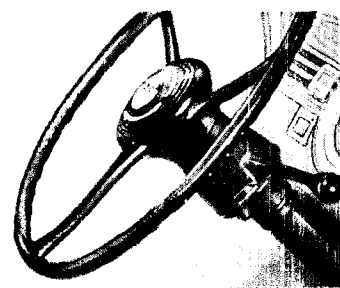
# AMERICA'S NEW

# Luxury



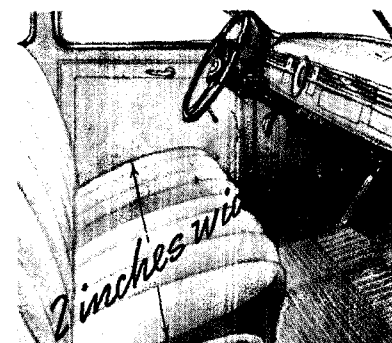
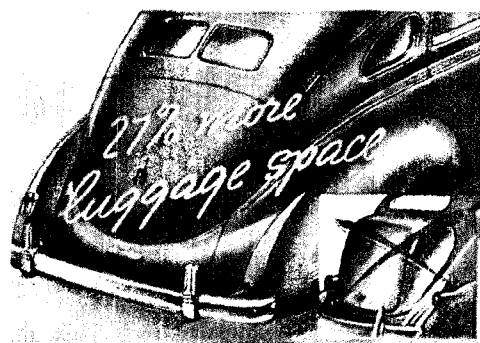
*A Bigger  
Finer Dodge  
at a  
Surprisingly  
Low Price!*

**P**ROUDLY Dodge presents the new Luxury Liner...the greatest car ever to bear the famous Dodge name! Startlingly new in design, sparkling in its new beauty of form and line, this new Dodge marks an outstanding achievement in motor car history! As Dodge's Silver Anniversary Creation, this brilliantly conceived new car is a milestone in automotive progress...a triumphant climax to a 25-year record of fine car building.



**N**ew easier way shift gears—with a perfected handy control near the steering wheel. You shift in the standard "H" pattern—nothing new to learn. Not an "attachable" but a sturdy, reliable integral unit of the car. Front floor is clear, unobstructed!

Styling of Rear Ensemble! Graceful sloping lines, which flow from top of windshield back to tail-light in one smooth, unbroken contour, completely conceal the new-type Dodge luggage compartment which is actually 27% larger than old "trunk style" compartment. Think of it—23 cubic feet of space in addition to spare tire and wheel!





l lounged on the bed facing him, leaning back against the pillows with her arms above her head.

"It's a little awkward," she said, "trying to talk without names."

He told her his name then. Merrick Holden. "Merry," he said. "The kids hung it on me when I was in school."

"My name's Ware," she said. "Tamsin Ware. Tam to my friends."

"It's none of my business," she said. "Maybe I'm just getting curious out of turn. You can get mad if you want to; but you've been here in the house for ten days or two weeks and you haven't spoken a friendly word to anyone. . . . You can't hate people that much, can you?"

He told her about it finally. He wasn't exactly sure why he did it, and he made no effort to explain it to himself, but he knew it was a relief to tell it to somebody. . . .

That night he checked in off his run and went into the hole in the wall where the drivers usually ate, and they had a new girl at the cashier's counter. He noticed her first because the woman they had before

was fifty years old and built like a boxcar. The new one was young and sort of cute. Besides that, the man talking to her was making a lot of noise. He was dressed up in a derby hat, and a black overcoat that was too wide in the shoulders and too tight at the waist, and you could spot him for a small-time racketeer as far as you could see him.

Merry tapped him on the shoulder and said, "If you want to bawl her out, buddy, why don't you take her home and do it?"

HE DIDN'T mean to start anything, but Derby Hat got tough about it. Merry knocked him down, and threw him out in the street on his face, and threw his hat out after him. He thought he was doing a favor for a lady, and when he came back inside, the new cashier slapped him so hard his teeth rattled.

Well, it was funny. For a week every time he came in she looked at him as though she'd like to put arsenic in his coffee, and then one night she thawed out for no reason at all; and maybe he should have known what it was right there, but he didn't. She said, "Say, you aren't still (Continued on page 104)

THE division superintendent of the bus company was speaking.

Merry stood in front of the desk, turning his hat in his hands. You couldn't escape the voice but you didn't have to pay attention to the words.

"... examination of the facts convinces us ... innocent of criminal conspiracy ... deliberate infraction of the rules ..."

Outside it was still raining. Merry looked down three stories at the hesitant traffic on Detroit Street. If only he'd get it over with, he thought. If only he'd come right out and say he's running me off the job, and not be so damned pompous about it.

"... consideration of the best interests of the company ... no choice in the matter ... dispense with your services ..."

"All right," Merry said.

He put his hat on. The voice stopped him at the door.

"... understand that the matter is not personal ... sake of discipline ..."

"Yes," Merry said.

He got the hell out before that went any farther. That left-handed sympathy was something he couldn't stand. When he hit the street he fell apart.

It wasn't the job so much. One thing was he'd been jamming gears on some sort of bus for six years, and he hated to spoil a good record. Another thing was it tore you apart to find out you'd made a fool of yourself over a woman.

He lighted a cigarette and took two or three drags of it before he stepped outside. There was a cold wind booming up Detroit Street. He pulled his hat down against the whip of the rain and started walking without thought and without any destination.

It was dusk when he got back to his room. Earl Maguire, who was taking over his run, knocked on the door and came in.

"Well, kid," Earl said, "how'd you make out?"

"I'm washed up," Merry said. He tried to imitate the superintendent's deep pompous voice "... innocent of criminal conspiracy, but the best interests of the company ..."

It wasn't very funny. He went over and lay face-down on the bed.

Earl said, "What you going to do now?"

"I don't know," Merry said. "The way I feel I won't ever do anything again."

He spent his twenty-fifth birthday in a strange room, in a strange boardinghouse, in a strange town. At dinner the redheaded girl who sat next to him at the table made an effort at conversation. Merry didn't pay any attention to her. He had noticed her before in the impersonal way you notice any pretty girl, but that was as far as it went. He had his mind made up then. If one woman was a tramp they were all tramps.

After dinner he went up to his room. He had a bottle of whisky in his bag and he dug that out, and sat on the edge of the bed and had a few drinks to celebrate the occasion, and it was dull as hell.

At ten o'clock somebody knocked at the door. When he opened it the redheaded girl was standing there.

"I'm sorry to bother you," she said, "but my window's stuck and I can't open it. I wonder if you'd mind ... ?"

The casing was swollen with dampness and locked tight. Merry knocked it loose with the heel of his hand, and propped the window up with a stick. The fresh air felt fine in the room. After that he stayed and had a cigarette with her.

He sat in the only chair in the room and she



HARRY  
MORES  
MEYERS