

9/26

ROAD RACING—Will America Buy It?

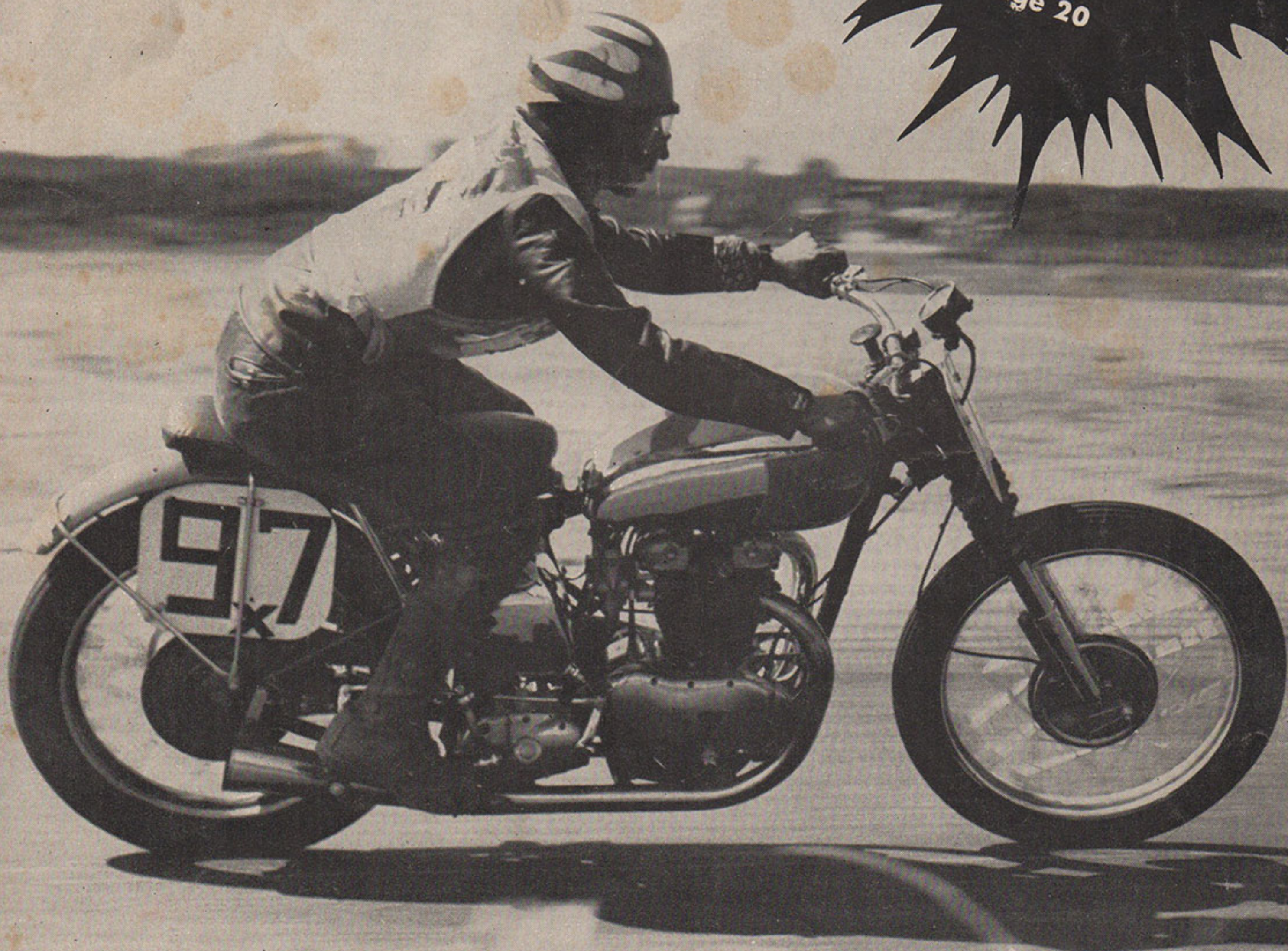


CYCLE

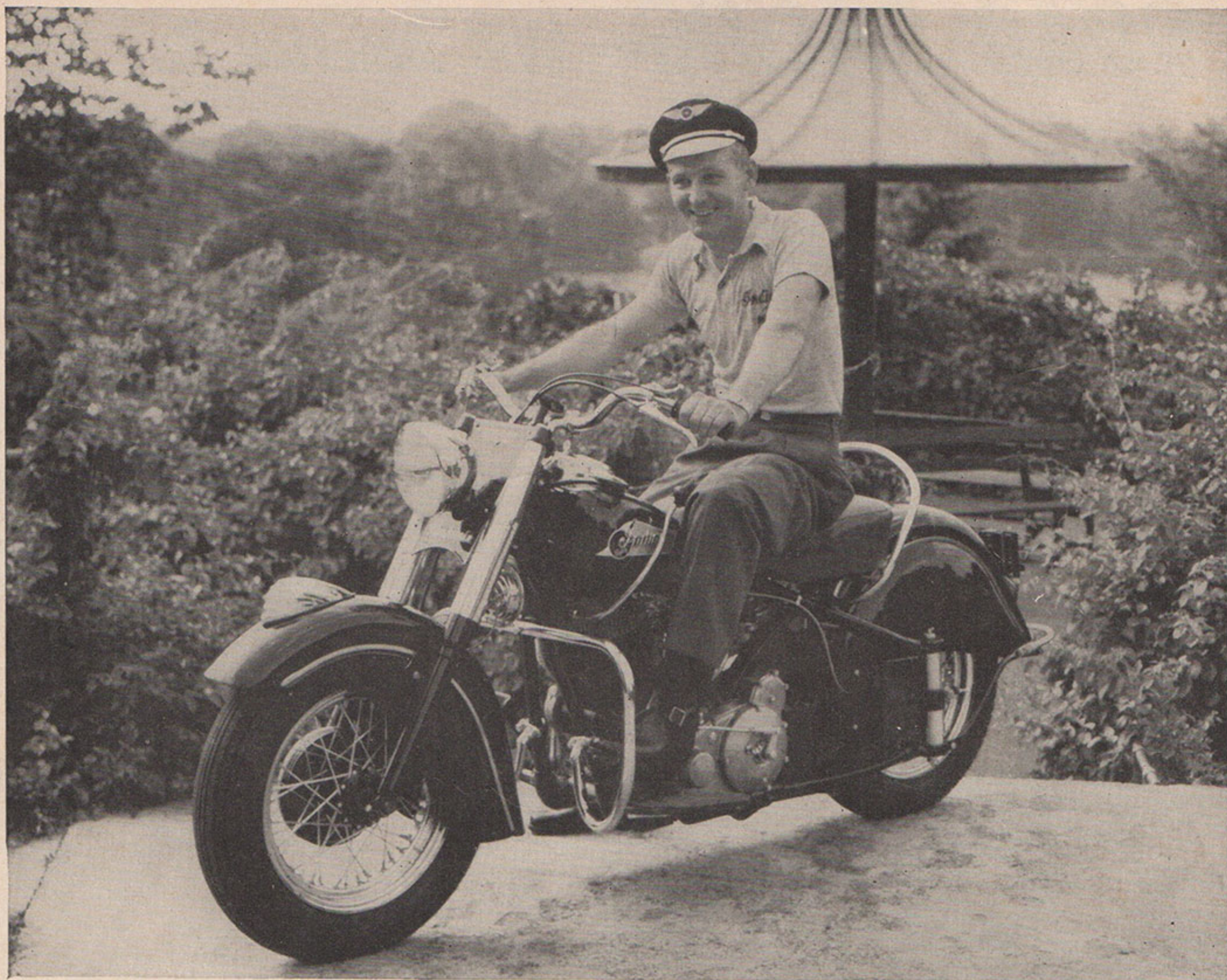
"World's Largest Monthly Motorcycle Circulation"

OCTOBER 1952 35c

THE STORY OF
"IRON MAN"
HAM
Page 20



ARIEL'S "IDEAL SPORTS MACHINE"—Road Test



Announcing . . .
the NEW 1953 *Indian "Eighty"* CHIEF

The new Indian "80" Chief is easy to handle, economical to run . . . the new Indian "80" Chief is king of the motorcycles in performance, appearance, and engineering perfection. On the road the new "80" will surprise even the most experienced motorcyclist by its smoothness, its comfort, and its acceleration and speed capabilities. See your local Indian motorcycle dealer today or write for free catalogue.

Dealerships available in certain choice locations — we invite your inquiry

Indian
Springfield, Mass.

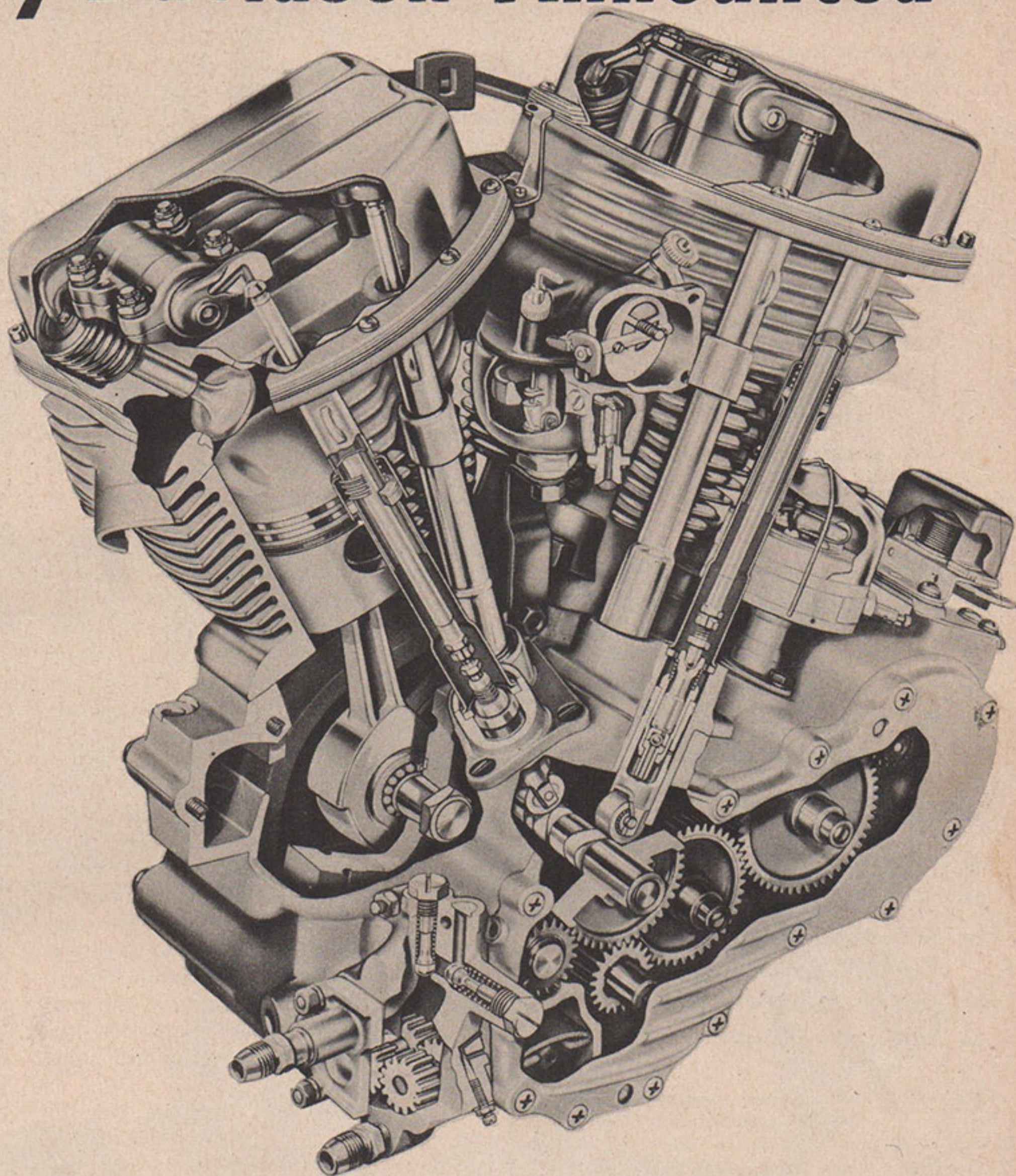
1953 Harley-Davidson Announced

Two-Stroke Raised to 165 cc

61 OHV Model Dropped

LIGHTWEIGHT FANS will be pleased with this month's announcement that the Harley-Davidson 125 has been boomed to a 165 cc displacement. At the same time comes word that the 61 cubic inch Harley has been discontinued after 17 years of production. Stemming from the many requests for extra power and acceleration, the 165 will give a more enjoyable ride than its predecessor, while still remaining in the lightweight class. All frame, fork, and wheel characteristics remain basically unchanged and no mention is made of any increase of weight. The new 10.1 cubic inch two-cycle engine produces 5.5 to 6 horsepower with a claimed maximum speed of 60 mph. Much greater acceleration in the gears is at first most notable. Fuel consumption should average out around 80 mpg for normal speed. To provide steadier handling at the higher speeds, the rake and trail of the front forks have been changed and the wheel-base is approximately 51.5 inches, while overall length is near 81 inches. Bore and stroke is 2.375 by 2.281 inches. Compression ratio on full stroke is 6.6 and after port closing 5.0 to 1. The piston is of a high silicon, aluminum alloy, dome top "Vanasil" without deflectors and with two pinned piston rings, $\frac{3}{32}$ of an inch wide. This new piston possesses the same coefficient of expansion as the cast iron cylinder. Piston slap is minimized while the engine is still cold and is going through the warm-up period. Over-all gear ratios are: low, 20.8 to 1; second, 12.2 to 1; high, 7.23 to 1. Weight of the 165 without fuel is 200 pounds.

Change of appearance of the new two-



Hemispherical combustion chambers, rotating overhead valves and special "Ampco" valve seats are features found in the world's finest luxury cars. The new 74 OHV Harley-Davidson has them in addition to being only motorcycle employing hydraulic valve lifters (redesigned on 1953 models)

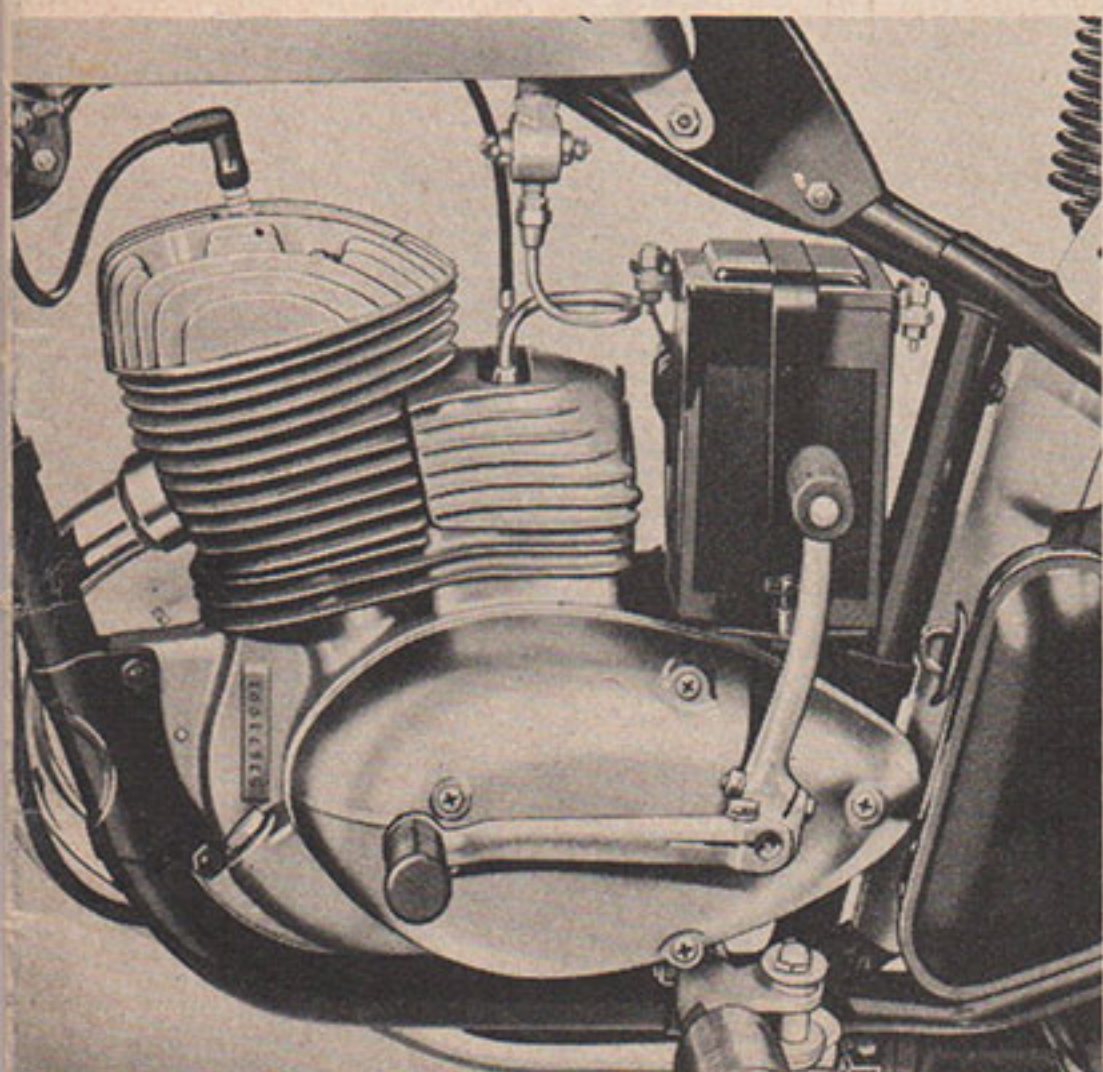
stroke is confined to the engine. Larger and more fins will be noticed on the cylinder resulting in better cooling. The spark plug has been relocated to the top of the combustion chamber for better fuel consumption and the intake port has been increased in size.

A finned aluminum cover extending from the rear of the cylinder encloses the previously exposed carburetor and the oil cleaner, the main purpose of which is for cleanliness. A pocket in the crankcase below the carburetor catches drippings and drains them out in the vicinity of the rear chain. A larger air cleaner is now fitted with corrosion-proof metal mesh.

Two Alemite fittings are provided to grease the main bearings to prevent corrosion during periods of extended storage. The crank pin is now of uniform section throughout its length for greater strength. The transmission filler neck has been relocated for greater accessibility. The ratio between engine and transmission has been

increased to speed up the transmission. Numerous changes in the gears mean greater strength and performance. Tooth width on the countershaft sliding gear has been increased 15 percent from .375 to .430 inch. Tooth width on the main shaft sliding gear has been increased 16 percent from .375 to .437 inch. Tooth width on the transmission main drive gear is now greater by 9 percent from .411 to .447 inch and the number of teeth reduced from 28 to 27. On the countershaft gear the number of teeth has been increased from 19 to 20. The ignition coil has been relocated and is now more securely attached to the front frame tube. Generator, coil and switch wires have been re-designed and re-routed for appearance sake with less chafing and trouble-free operation resulting. Tire equipment on the 165 will be 3.25-3.50 x 19 Goodyear, Firestone Champion or Firestone Sportsman.

The shortcomings of the throttle on
(Continued on page 36)



Boosted from 125 cc (7.5 cu. in.), to 165 (10.1 cu. in.), the new Harley lightweight has increased its speed to 60 mph. Mileage is claimed to be 80 mpg. Enclosed carburetor is cleaner

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CONTENTS

- 3 1953 HARLEY-DAVIDSONS ANNOUNCED
- 4 BEHIND THE LINES
- 6 RIDER WRITINGS
- 8 QUITE THE CUSTOM—M. Cox
- 10 ROAD RACING—B. Canaan
- 12 BATTLE IN THE CLOUDS—F. H. Baer
- 14 GERMAN GRAND PRIX—G. Glaser,
W. Onslow, R. Mailander
- 16 ARIEL'S IDEAL SPORTS MACHINE—
B. Greene
- 20 "IRON MAN" HAM—J. Earp
- 28 PEDAL POPPERS—G. Glaser
- 32 TRACK-SIDE WITH PEN AND LENS
- 38 HE DARED TO BE LIKE OTHER GUYS—
V. Carruth
- 39 WISCONSIN CHAMPIONSHIP—B. Weber
- 40 WORLD AT A GLANCE

COVER Bobby Turner exemplifies the typical American road race rider as he skirts the Torrey Pines circuit near San Diego, California. Whether or not this type of competition becomes widespread will depend on promoter's ability to obtain suitable grounds and the complete acceptance of the race by the national governing body. The riders are eager!



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DID YOU FEEL that bit of a nip in the air while out riding the other night? Yep, it's almost time the frost was on the pumpkin and that means the "hot stove league" will soon be in full swing throughout the east. But whether you've got your feet propped up against a cracker barrel back in Pine Ridge or are riding between the cracks of sunny California, chances are that, next to Marilyn Monroe, the big topic of the day concerns the contemplated changes in the 1953 bikes. It's that time of the year, as you will notice by the announcement of one manufacturer in this issue. We wonder if it will be a year of refinements or radical changes. One fact seems well established: the single, V twin, and vertical twin engine designs are not about to be displaced. Fine performances are being shown by each of these proven power arrangements, so much so, in fact, that the constant clamor for refinement has been diverted from power to riding comfort.

Since their first introduction in 1947 the telescopic front forks have been almost universally adopted. Regardless of what a minority had to say about their inadequacy at first, the telescopes brought new comfort and renewed interest to thousands. Now it appears that the swinging arm rear frame is about to receive that same common approval. Many manufacturers have already bought it, while others are still giving the system exhaustive tests under racing conditions. It is quite probable that one, possibly three, popular makes will employ rear swinging arm suspension by the time the showings for '53 have been concluded. At any rate, we know of at least one concern here in the States that is well along on the production of swinging arm adaptation kits that can be fitted to one of our most popular bikes.

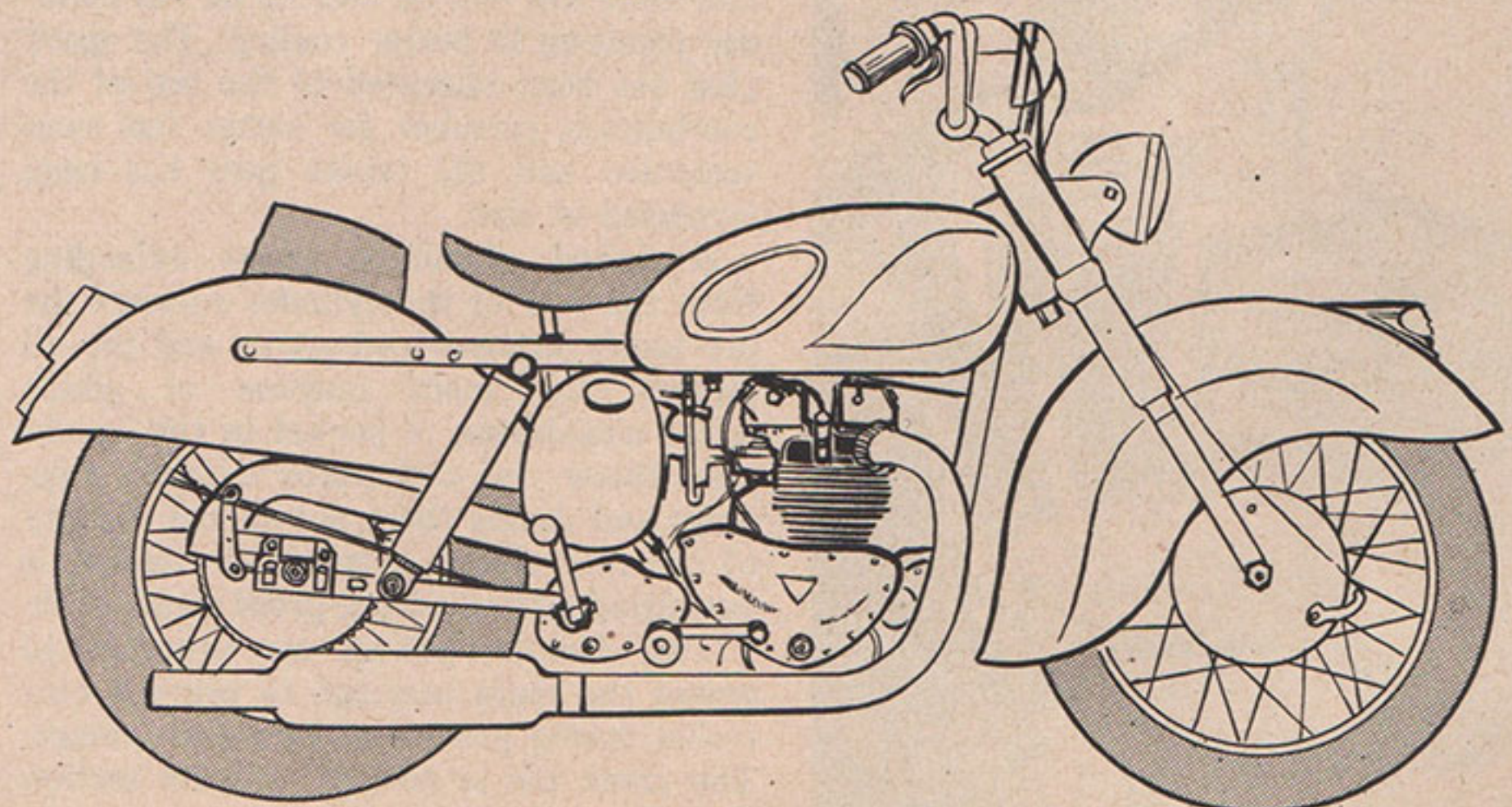
From the facts we've learned over the past two and a half years of road testing, it is clear that, outside of rear suspension, the points most in need of attention in 1953 are small ones, physically speaking, but nevertheless of great importance to one's comfort, safety and peace of mind. In most cases, lighting, with the exception

of sealed beam units, was found to be below par. While headlighting has been somewhat improved over the last year, the average beam is still too weak and not properly focused. With the exception of four known manufacturers, none of the motorcycle tail lights tested have been able to comply with the California State lighting specifications; the saying being, "If they pass California lighting tests, they pass anywhere in the U.S."

Louder horns are in order—one that does not vibrate out of volume at high speeds, where they are most needed. Acid slinging batteries, positioned out of the way of all contact with the rider, would save on the cost of clothing, besides, short pants will soon be out of season. Deep, sponge rubber saddles were stock equipment on too few models this year, usually appearing only on the buddy seats. The steel-ridged, fan-shaped, door-spring saddle was not made for roaming the plains. It has made quite an impression the last few years, but its passing in '53 would be a boon to mankind. While undoubtedly more expensive to manufacture, fork locks, or at least ignition locks, would be welcomed on the new models. These are not radical changes, nor terribly expensive ones, but they are so elementary as to be very important.

In line with the new models, we have reliable news that West Coast BSA distributor Hap Alzina has just imported a whole stable of racing breeds, actually 100 super-tuned 30.50 cubic inch Star Twins that are expected to make their presence keenly felt wherever sportsmen meet. Their forty-incher A-10 has been re-cammed and is claimed to be a real terror on both top speed and acceleration.

In balmy Italy, it is said that Moto-Guzzi is playing with a four-barrel in-line 30.50 cuber with shaft-drive and no carburetors. While this experimental job will probably have no effect on their immediate road models, it is a token of progress, the type we all like to hear about. Yes, it looks like a year of tempered modification—let's hope that the emphasis is put in the right place, where it can be felt as well as seen.



When staff artist Chuck Doe was jokingly asked what he thought 1953 models would be like, he grabbed his pen and went to work. The result was a mixture of everything that passed over his drawing board in the past year. You'll probably be able to pick out at least one semblance of your own brand; the only possible exception being the rear fender of the Moto-Guzzi racer

BSA

"STAR TWIN"



BSA
Spring
Frame

"Western" type
handle bars

30.50 CU. IN.
**VERTICAL
TWIN**

**STREAMLINED
appearance**

Eight inch
millinite
front brake

Factory polished
and tuned engine

**CROSS
COUNTRY
endurance**

BSA telescopic
front forks

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overhead valve engine

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performance**

BSA quality
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HAP ALZINA — 3074 Broadway, Oakland, Calif.

RIDER WRITINGS

Dear Mr. Greene: After experiencing a wonderful weekend at Laconia, N. H. with some fellow enthusiasts, an idea occurred to me. Why can't we cyclists organize "centers" throughout the United States where traveling riders can obtain such information as: names and addresses of local motorcycle shops; location, prices and rating of local motels, cafes, etc. I'm sure that the cafes would furnish sample menus for listing. After all, the most important end of any traveler's day means a good meal and a place to stay. Any cyclists who cared to do so could even list their own homes as welcoming out of town travelers. This might encourage more riders to travel and help knit stronger friendships. I know that several of the Knight Riders, the club I belong to, would be glad to do so. Such a travelers' aid would require someone to organize and possibly later publish a list of all such "centers" and I would like to offer my services in this respect. All interested clubs and individuals may write me at: "Seven Acres," Auburn, Mass.

Butch Boutwelle
President Knight Riders M/C

Dear Mr. Greene: During the past week, our West Coast Representative, Mr. H. A. Nelson, has been in Springfield discussing various subjects with the home office and one of the items that popped up was the possibility of your road testing and reporting on the Norton International or the new Norton 88 model Featherbed machine.

I have discussed this matter with Mr. Nelson in detail and within a very short period of time, we will turn over to you through Mr. Nelson a Norton International machine for testing purposes.

We certainly appreciate the opportunity of turning this machine over to you for this comprehensive road test and know that many riders throughout the country have great faith in your reports.

If we can be of any further service, let us know.

Robert F. Finn
Sales Office Manager
Indian Sales Corporation

Bob: I would like to pass on to you an item on cycling I considered most amusing.

Last summer my wife was working as a waitress in a local fountain, when a lone jockey parked his mud-crusting bike out front and entered. With very little encouragement, our hero announced to the wife that he had just made the trip in over the Alcan Highway and that he was the first man ever to complete the trip on a cycle.

Now, you can well imagine his embarrassment when he was told that his was a

very broad statement, since my wife and I both had arrived only weeks before aboard her Matchless and my Triumph.

My opinion of the road as of last summer was very good all the way in and if there have been any changes, I'm willing to bet they are for the better.

So, to any future contestants, just a few words. It's a long trip, with the biggest mosquitoes I've ever seen. But, as for the possibility of the road, please remember, trucks and autos make it in daily.

Earl and Jay Harris
Anchorage, Alaska

Dear Sir: I had just finished looking over my July issue of CYCLE and when I first received it I thought it was pretty great that you were adding eight extra pages. Then I saw that it was eight pages of pulp paper. This is the cheapest paper anyone can buy. I think that if you can't afford the good calendar paper, don't even bother to put it in.

Another thing why do all motorcycle magazines have so much about all of those old time cycles?

About the most called for bike is of the 500 cc class. Why don't you test more of these instead of those of which are under this class? The smaller bikes are more for people who depend on them for merely going to and from work.

There are many good bikes you haven't tested yet, such as any one of the Royal Enfields or the BSA "Star Twin." Couldn't you somehow rig up a test between the Tiger 100 and the Star Twin together to determine which is the better of the two?

Tom Stinski
Menasha, Wisconsin

(Granted that in some cases no news is good news, but in reference to the eight page insert, I doubt if many will agree. We still feel it was a step in the right direction. Fortunately, the meaning of the printed word remains unchanged regardless of the stock it is printed on.—ED.)

Dear Bob: Good mag you got. How about some place for giving us guys who don't know too much about really making our mounts talk, so that we might learn how to take care of ourselves when we get into a bad situation, or so that we might practice for competition without banging ourselves or our cycles all black and blue. I've ridden for more than a year, but don't know enough to say I'm really a safe rider—for myself, that is. I don't get the benefit of "bench racing" because I'm not a club member, and live pretty much in the sticks.

An article by one of the police department motor instructors might be just the thing.

John Sutton
San Fernando, California

Gentlemen: I have hesitated to be counted because I represent a very small group of riders, the ultra-conservative group which is practically no group at all. However, I will always believe that the middle aged conservative group will be the most

dominant when this country produces a modern motorcycle such as will appeal to people who simply cannot consider the usual type of obsolete machine.

Offer the public a product that in every respect is the equal of the modern car from the standpoint of silence, cleanliness, riding comfort, dependability, ease of starting, convenience and safety, and you will see the use of motorcycles gradually recognized by millions.

The combination of chopped fenders, chopped muffler, suicide clutch, ridiculous handlebars, missing license plate and illegal lighting is most common with a type of riding that is not doing motorcycling any good.

L. Jordan
Temple City, California

Dear Sirs: I am writing to you at the request of my son Kay C. Kimes, who is in the army and stationed at Schofield Barracks in the Hawaiian Islands.

He has a BSA 40 cu. in. 51 model, and the BSA dealer there, Mr. Schubert, will sponsor his entry at Bonneville, if he can get an invitation. There are no facilities there to enable them to get a complete performance record, but the dealer must think it's real good or he wouldn't agree to pay all expenses for the trip. Kay called me last night from Honolulu, and said he could get his leave if he received the invitation.

Maybe it would be possible for him to run as a guest entry, since he would have to come from such a distance.

I hope you can do something for Kay in this matter, as he surely has his heart set on making the trip.

Leo G. Kimes
Bellflower, California

(Kay was sent an invitation but failed to show at Bonneville—ED.)

Dear Sirs: I recently received a copy of CYCLE Magazine and a buddy took the

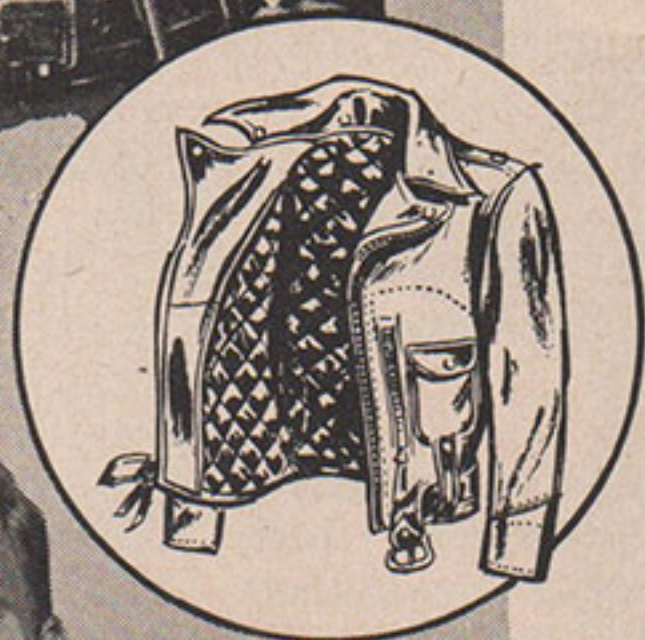


enclosed picture of me while I was enjoying it. I got quite a kick out of it and thought you might enjoy seeing it.

Cpl. E. Barber
APO No. 6
San Francisco, California



LADIES' STYLE J-14
LENGTH 20 INCHES
SIZES 10 TO 20
PRICE \$31⁷⁵



Inset showing 100% nylon
quilted lining

MEN'S STYLE J-24
LENGTH 24 INCHES
SIZES 34 TO 48
PRICE \$35⁹⁵



FIRST WITH THE FINEST

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100% Nylon-Lined

TWIN-STYLED HORSEHIDE MOTORCYCLE JACKETS

Buco's famous front quarter horsehide jackets are now lined with 100% nylon quilted-to-wool body linings and 100% nylon lined sleeves. Nylon has the highest resistance to abrasion and friction—outwears any ordinary fabric 10 to 1 and is guaranteed for the normal life of the jacket. It has a luxurious feel—is easy to slip in and out of and is quickly cleaned with a damp cloth.

No detail has been overlooked to bring you the finest quality garment money can buy. Tailored to perfection, it will give you years of satisfactory service.

✓ CHECK THESE FEATURES

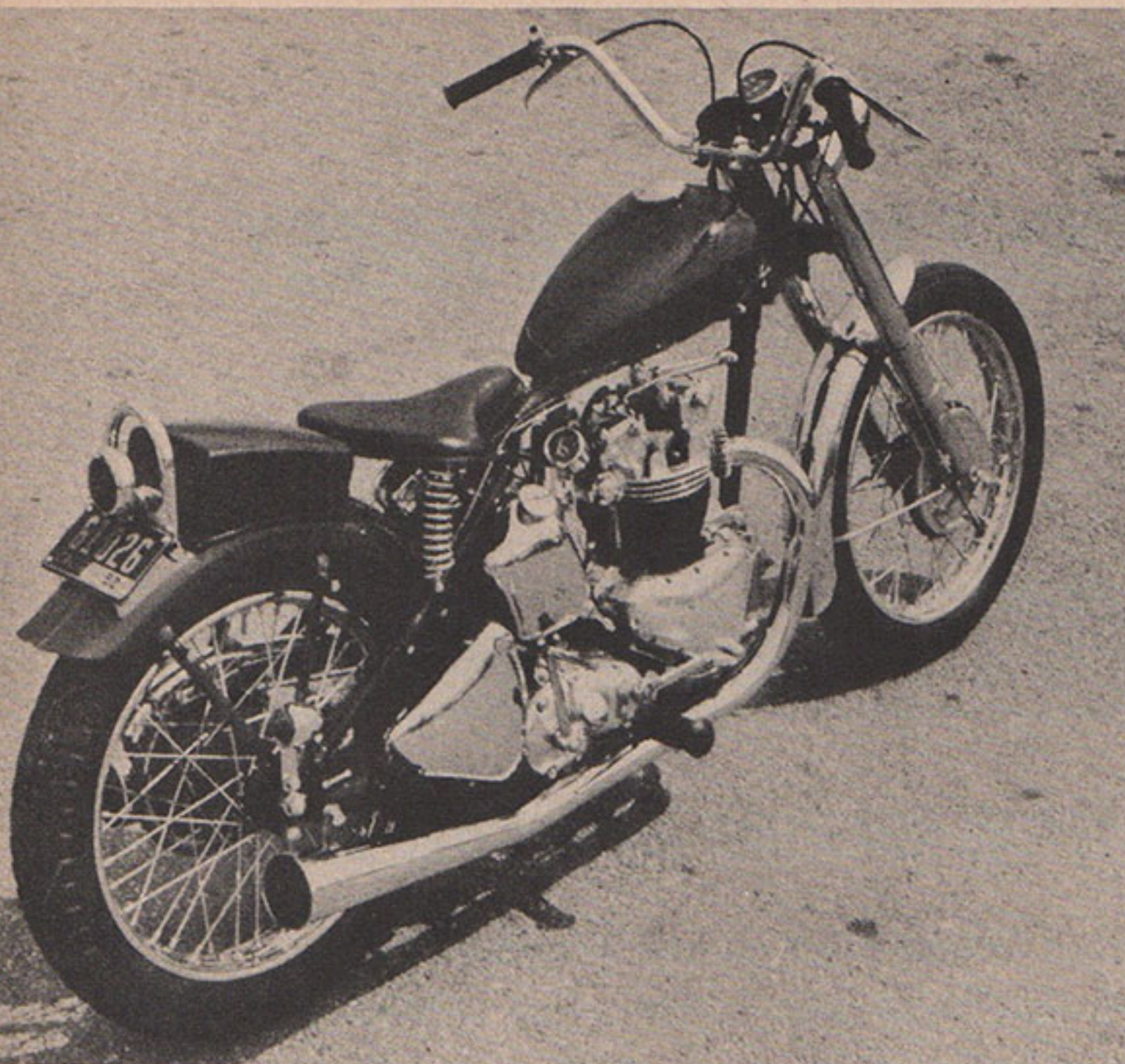
- Men's style has separate full cowhide leather belt at no extra cost.
- Full cut, free action, self-folding back.
- Zipper closing front pockets.
- Snap closing change pocket.
- All seams reinforced.
- Collar snaps for detachable mouton collar.
- Sleeves zip close at the wrist with positive lock.
- Both styles have inside back loop—secures jacket to trouser belt—prevents jacket from creeping.

At Buco Dealers Everywhere

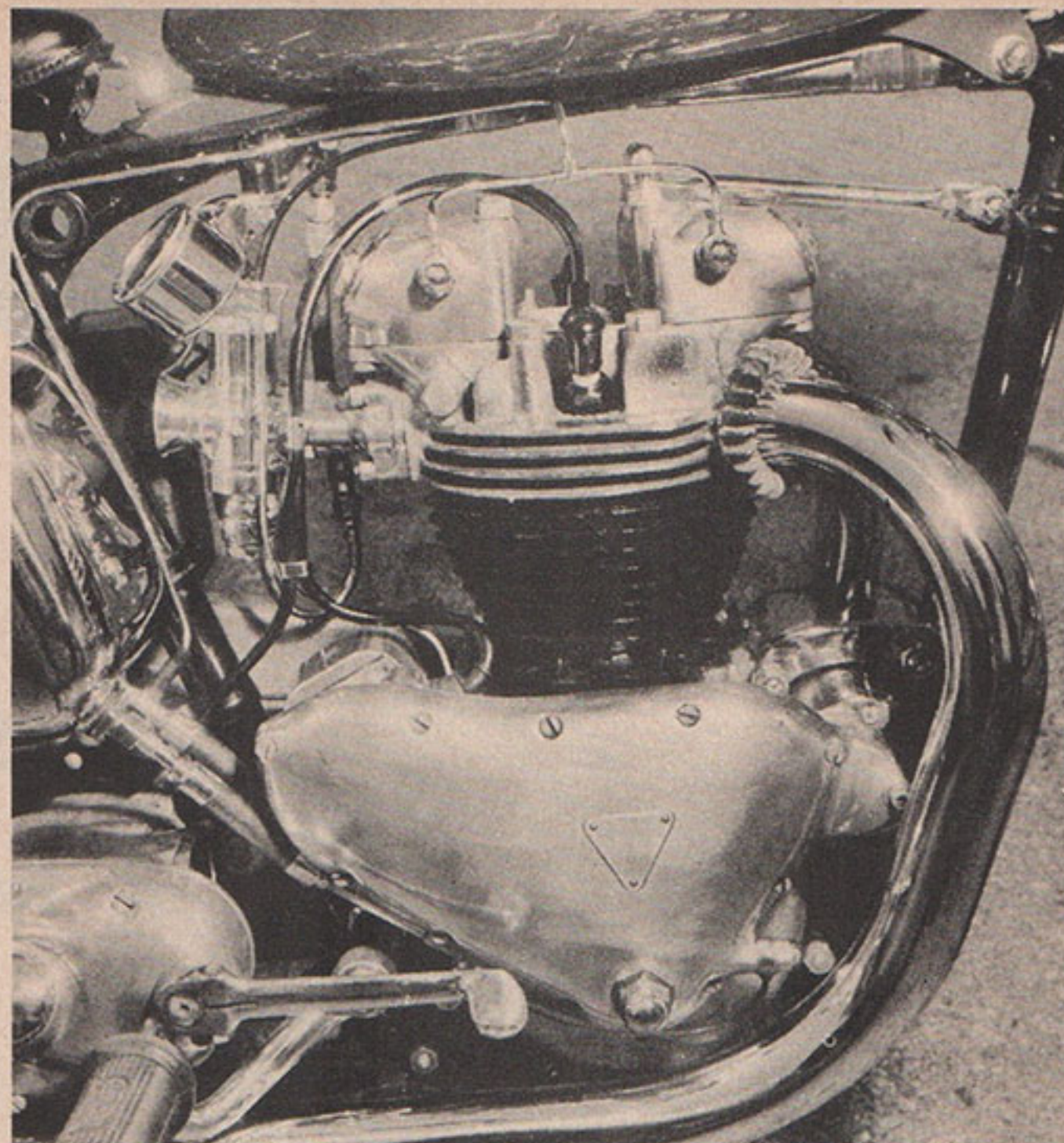
Joseph Buegeleisen Co.

1302 EAST WOODBRIDGE

DETROIT 7, MICHIGAN



When Russel Gilbert says "that's my bike," there's no doubt in anyone's mind. Like the Harley-Davidson below, Gilbert's Triumph vertical twin reflects his desire for individuality, so neatly expressed through his ability as a welder. Notice that taillight, license bracket and lifting handle are all one unit, built up (silver soldered) from 16 separate pieces



Standard pillion pad was re-covered with imported English kid by Gilbert's wife (take a tip, girls... new way to a man's heart). Hand formed amp and oil gauge bracket straddles frame ahead of seat. Nearly all parts that aren't painted red have been chromed, including carburetor. Headlight is converted Appleton spotlight with Mustang reflector, lens

QUITE THE CUSTOM

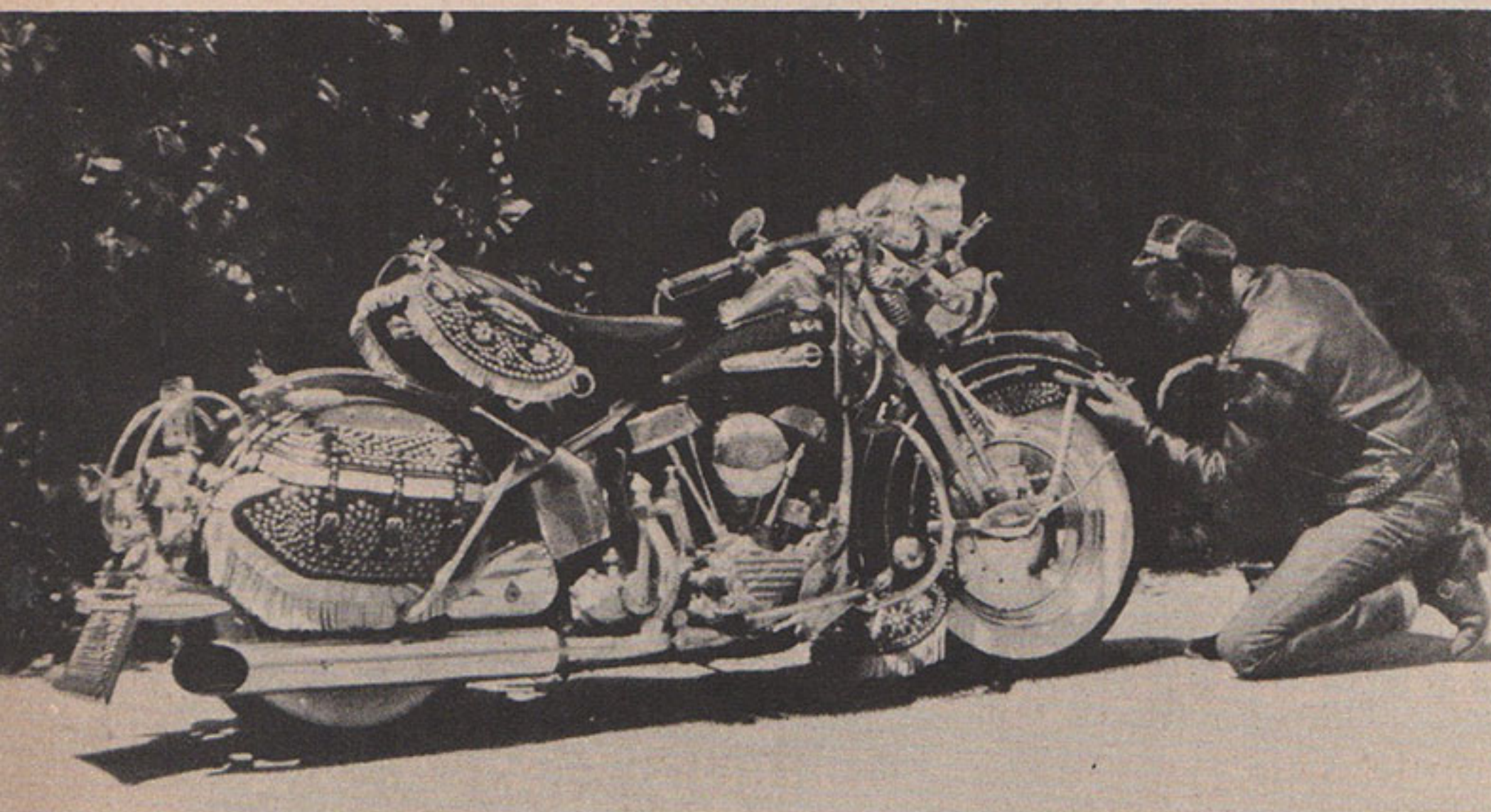
**Some Take It Off, Others
Pile It On. Both Are
Motorized Glamour**

By Mary Cox

ROBERT GOTTFRIED of the Associated Telephone Company, Long Beach, California rides his hobby in more ways than one. Dear to his heart as a prancing Palomino, his Harley-Davidson '48-74 was just a shy new motorbike four years ago. Today, it could win top honors in a beauty contest, for it possesses all the dazzling glamour and distinction of a star—motorized star, that is.

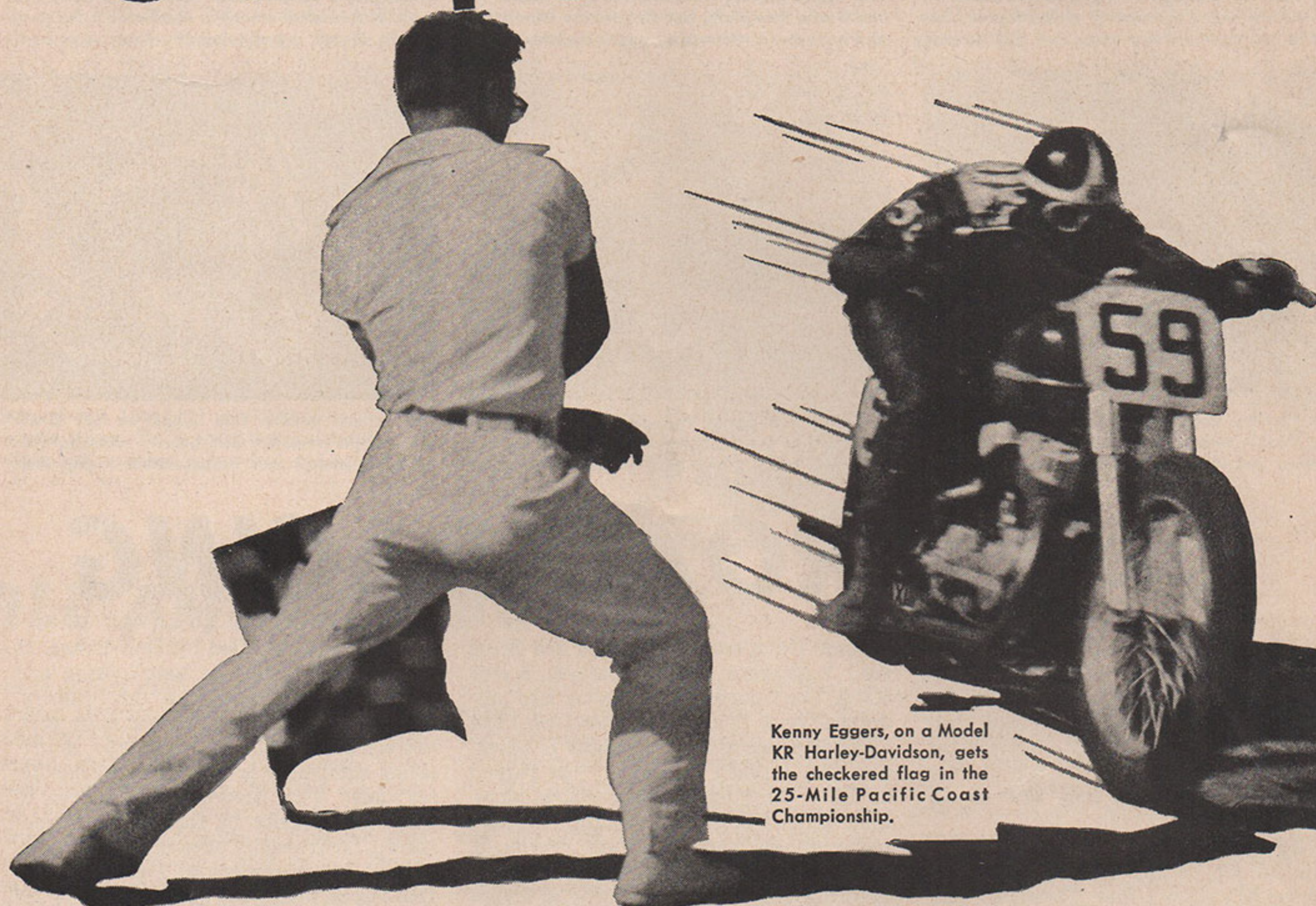
Painstakingly Gottfried, during Wisconsin's long, cold winter evenings, satisfied

his artistic soul and developed his absorbing hobby by adding a band of chromium here, and a touch of simulated rubies, emeralds, sapphires and diamonds there, to his snow-bound cycle. Gradually, his original designs for a chromium Pegasus with some twentieth-century oomph, have produced a masterpiece of decoration worthy of Hollywood's fabulous designers. There are seven gleaming headlights, three taillights—all dazzling chromium; front and rear leather mud-guards and saddle bags encrusted with some 2,000 hand-set chromium studs or buttons. Underneath a huge sponge rubber seat, onto which "three riders have squeezed, though not in comfort" says Gottfried, are four more taillights, multi-colored, while the wheel hubs boastfully twinkle with the tiny red and blue lights which encircle them. The seat is neatly trimmed with white leather fringe, as also are the saddle bags. Topping all is a fearful and wonderful, organ-like chromium exhaust pipe, four inches in diameter, which carries to Gottfried's receptive ears the music of the winds and the seven seas when he "lets-er-out" under the limitless skies on the country's broad high roads.



Bob flicks a dust speck off his 20th Century Pegasus. Beneath jewelry lies '48 Harley raised from depths of mediocrity with loving care

Harley-Davidson sweeps the field



Kenny Eggers, on a Model KR Harley-Davidson, gets the checkered flag in the 25-Mile Pacific Coast Championship.

New Model "KR" wins 25-mile Pacific Coast Championship at Portland (Ore.) Meadows. Harley-Davidsons take 8 out of the 9 events.

Time and again, Harley-Davidson motorcycles prove their right to the title, "All-American." In the recent Pacific Coast Championship races, the new Model KR won every event entered. Harley-Davidsons were crowned winners in 8 of 9 scheduled events. A field day for America's best known motorcycles! You can be proud to own and ride a Harley-Davidson, the machine

that piles up record after record on hill, road and track. There's fun and excitement in every mile you travel . . . thrills galore from their smooth power, breathtaking "digout," marvelous riding comfort, speed, stamina and utter dependability. Test ride one of these magnificent new motorcycles today. See them at your nearest Harley-Davidson dealer *now!*

25-MILE CHAMPIONSHIP

1. KENNY EGGERS - Harley-Davidson KR
2. GEORGE COOPER - Harley-Davidson KR
3. JOE LEONARD - Harley-Davidson WR

Time: 18 minutes, 23.77 seconds

10-MILE AMATEUR FINAL

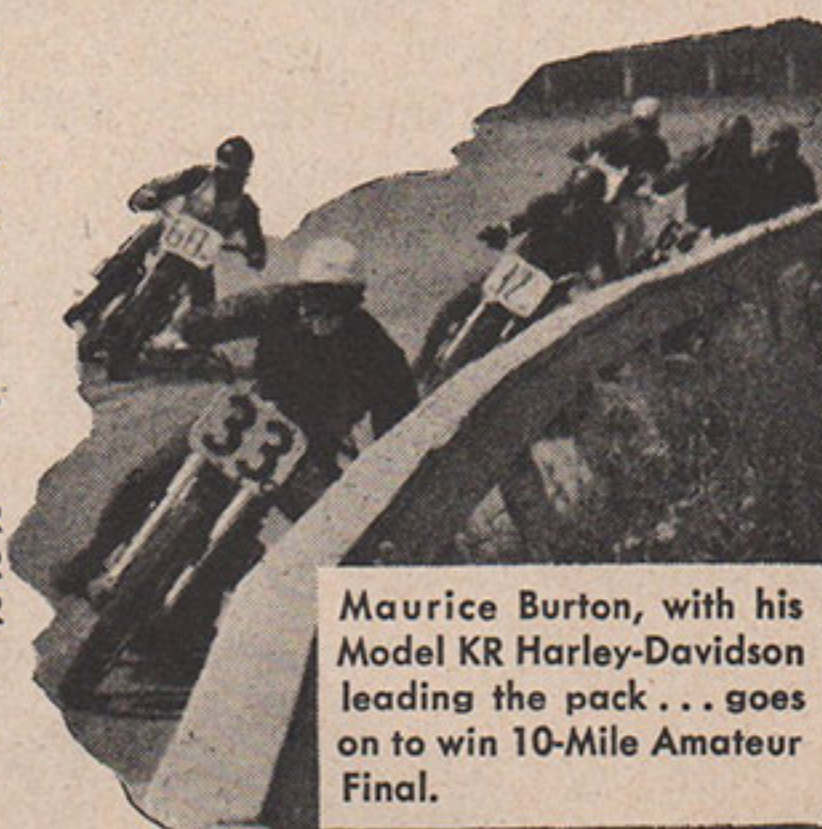
1. MAURICE BURTON - Harley-Davidson KR
2. DICK KELLOGG - Harley-Davidson WR
3. RALPH MOOERS - Harley-Davidson WR

Time: 7 minutes, 37.28 seconds

10-MILE NOVICE FINAL

1. CHARLES HOAGLIN - Harley-Davidson WR

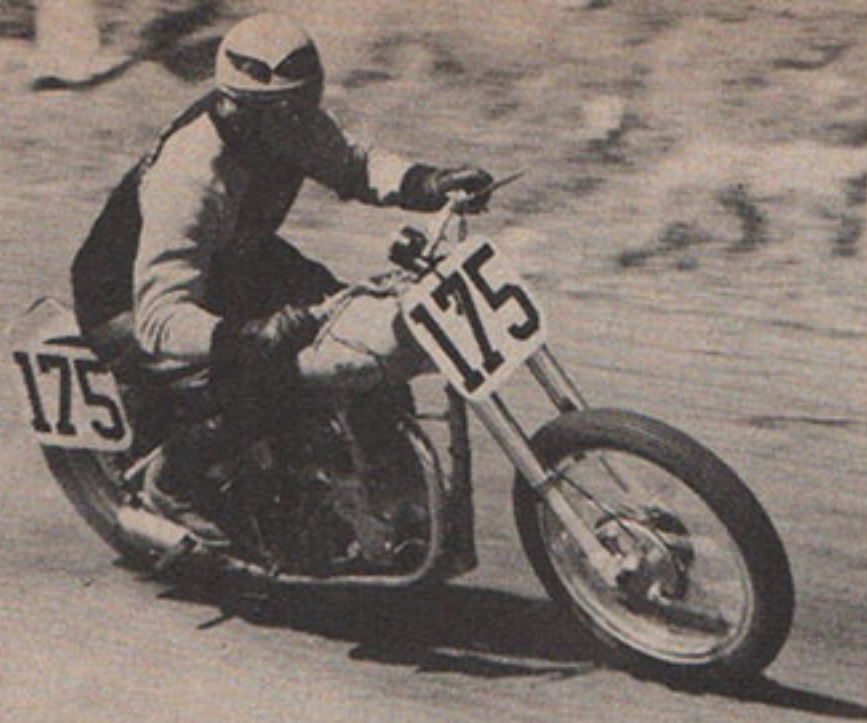
Time: 7 minutes, 40.48 seconds



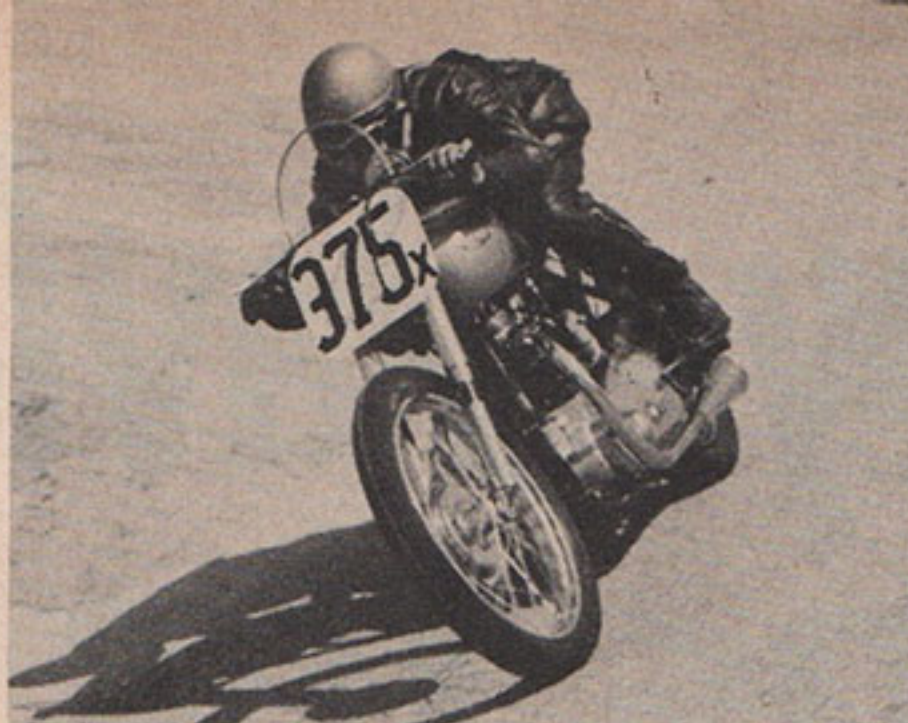
Maurice Burton, with his Model KR Harley-Davidson leading the pack . . . goes on to win 10-Mile Amateur Final.

HARLEY-DAVIDSON MOTOR CO., MILWAUKEE, WISCONSIN, U. S. A.

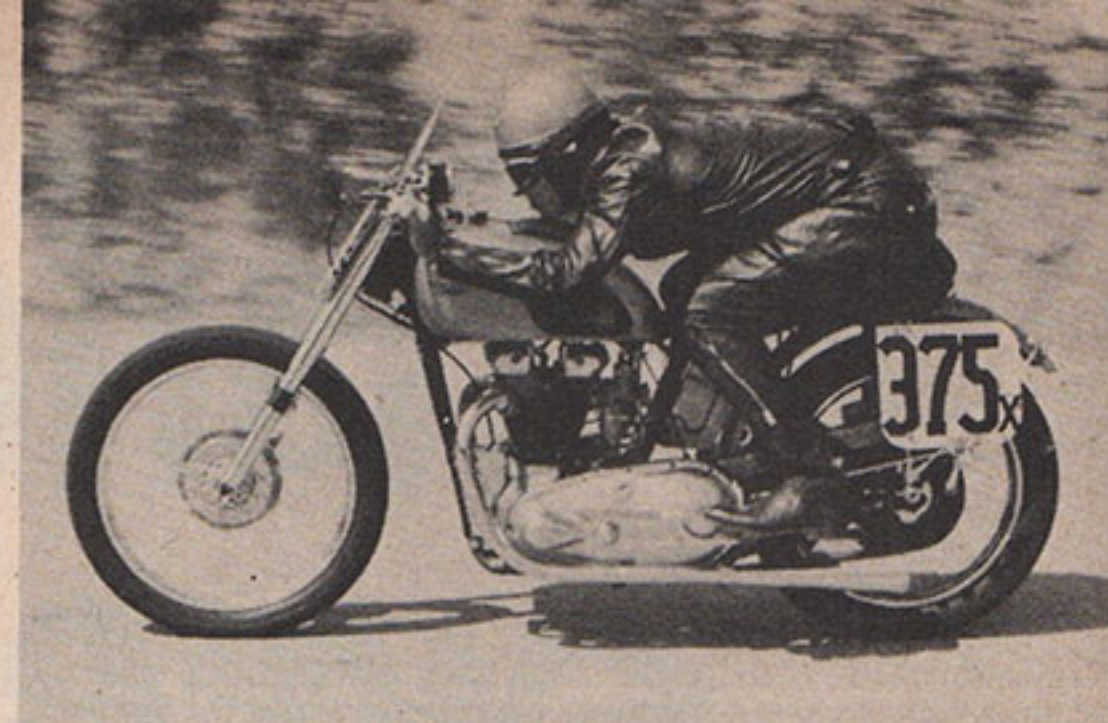
Photos by Bob Chaney



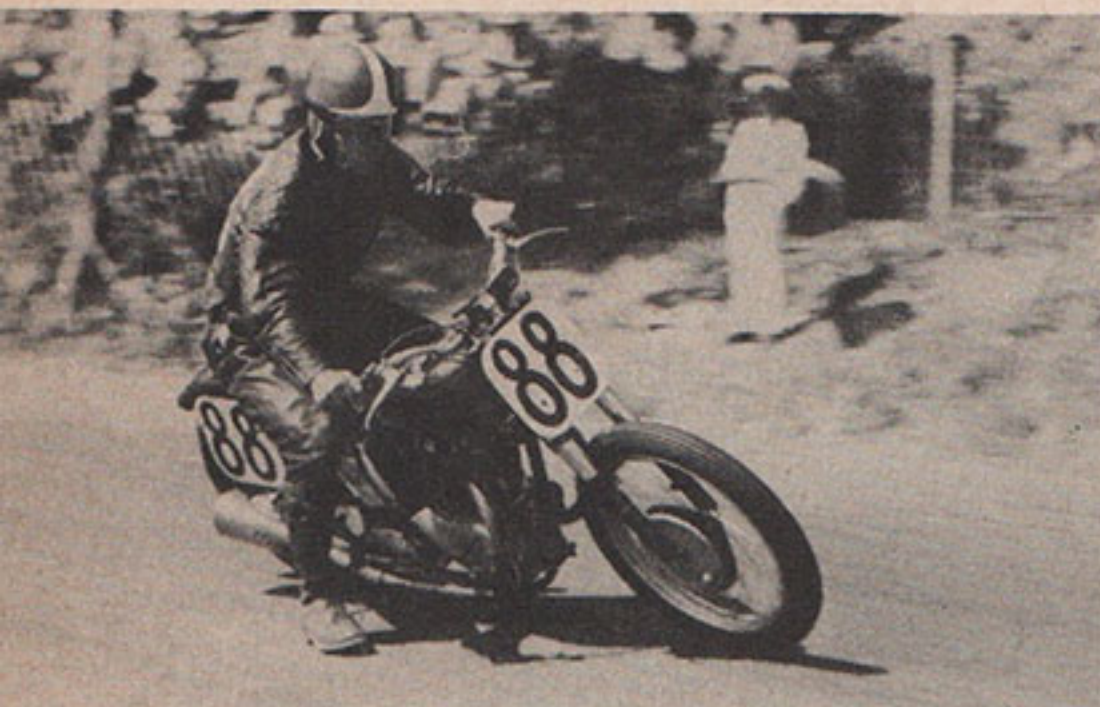
Ray Arnold, although riding a Junior Class (21 cu. in.) Velocette, succeeds in giving Senior Class (30.50 cu. in. up) boys a run for their money



Dick White corners his beautiful silver "Bird" in true Grand Prix style. Handlebars are almost flat and have been trimmed to approximately 24 in.



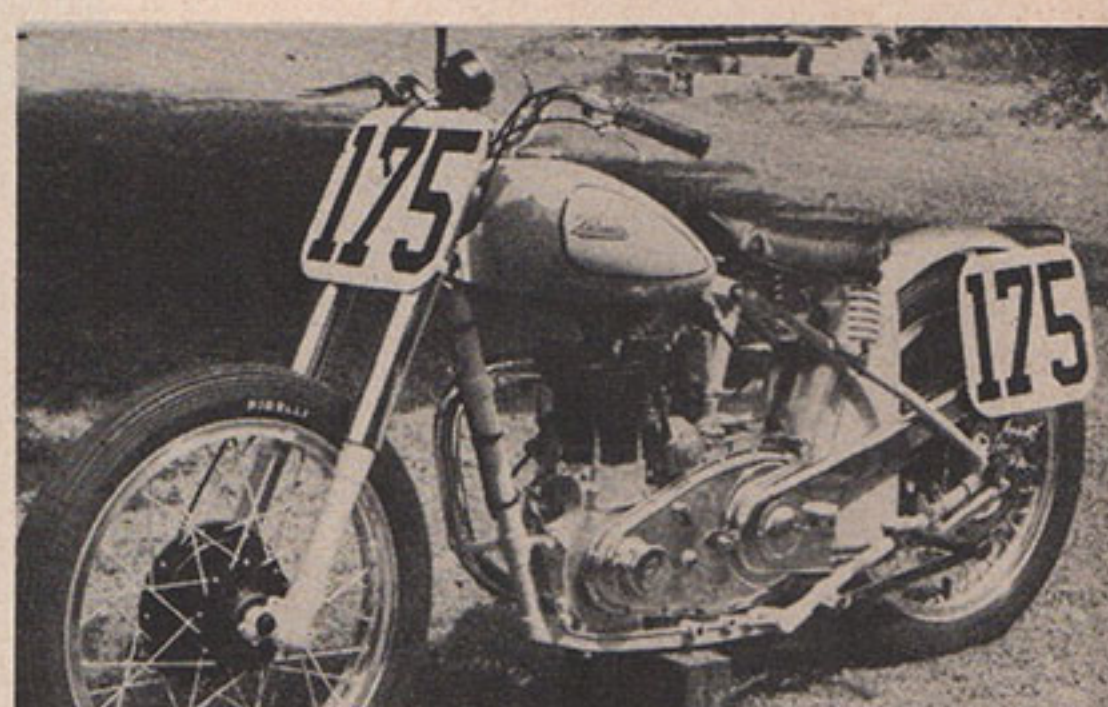
Tucking in is an important item at speeds of 110 mph. If this ideal crouch is comfortable for you, use it; if not, try moving the foot pegs back



Don Hawley, popular and fiery dirt track rider, has trouble breaking his habit of shoeing the corners, but he doesn't seem to suffer from it



It's a 61 cubic inch Vincent V-twin for Marty Dickerson in the Unlimited Class. So far, the big jobs have taken a back seat to 40 and 30 cubers



The canary yellow Velo tuned by Bill Lewis matches performance with beauty. Note flat sided alloy wheels and Italian Pirelli racing tires

Text and Photos by
Bob Canaan

ROAD RACING...

ALTHOUGH AT THE PRESENT time there are no manufacturers in the United States producing what might be considered a strict road racing bike, there is no reason why a team of American riders couldn't compete in the Isle of Man TT races, even though they were to ride foreign machines.

Fergus Anderson and Les Graham do a beautiful job on the Italian Moto-Guzzi and the MV Agusta four. These two Englishmen draw rightful respect from Europe's finest when they wheel out their products from sunny Italy; but the world recognizes them as British riders.

This is the time for new riders to be preparing themselves for international competition, by constant practice at home events, and by serious study of all available information. When Indians won their one-two-three victory at the Isle of Man in 1911, they were ridden by British riders; quite possibly because there were no experienced road race experts available in this country. Although the major portion of Catalina Island is unpaved as yet, it may someday soon rival the Isle of Man in international importance. In 1911 the whole of the mountain section of the Isle of Man was also just a series of dirt road and trails . . . they paved it!

U.S. automobile manufacturers now recognize road racing and the sports car market here at home. Nash has produced a sports car for sale through their showrooms throughout the country. Chrysler and Cadillac have taken serious interest in

engines for sports cars, which are being used both here and in Europe. Kurtis Kraft, like Cunningham, is going into production on a competition sports car. The Champion Spark Plug Company is advertising, in national magazines, that Ferrari in Italy recommends their spark plugs. Isn't it quite possible, as motorcycle road racing grows, and riders are developed, that other manufacturers will rise to the challenge and produce this type of equipment?

Aside from being a training ground for possible European competition, circuit racing offers the best chance to "sell" motorcycling to the general public; most of whom have no connection or interest in the sport. Those who have attended the combined motorcycle and sports car races were very much impressed with the speed, skill and neat appearance of the bike riders. Even one cyclist was heard to remark when he had finished the race: "After I won my last dirt track race, I was so tired and dirty I don't even remember receiving the trophy. Asphalt racing isn't just a test of endurance of rider and equipment. It's thrilling and clean and a welcome change."

Since promoter Al Papp first organized road racing here on the West Coast, there have been several owners and riders who have seriously set about to improve their machines and their riding skill. The BSA Bantam which Bobby Michael rode to victory in the Lightweight class at Torrey Pines (see Sept. issue, CYCLE Magazine)

is owned and modified by Don Evans. It is without a doubt the best looking and performing Lightweight in this country. Bikes for this class are, for the most part, two strokes and there is very little, if any, racing equipment or information available for them. This however, only serves to whet the appetite of the true race mechanic. Lightweights offer unlimited possibilities for experiment and development. Don has increased the power output of his little jewel from the standard four hp to eight hp, and top speed from 48 to 61 mph. Some of the changes involved are: very short handle bars, to reduce frontal area, both front and rear brakes operating from one foot lever, remote mounted carburetor float bowl, 9.1 compression ratio (there are no limits on fuel or compression ratio in this class). Don tells us that the length of the exhaust pipe is determined by cutting off a few inches and then checking for a horsepower increase. More and more is trimmed off until you reach the best length for highest horsepower output for your particular engine (or you run out of exhaust pipe!). Don's rear wheel sprockets have been made by filing them a tooth at a time out of aluminum stock. As overall weight is a very important factor, deleting a few ounces here and there adds up to a few miles an hour when it counts. Bobby Michael's weight (114 lbs.) gives him a definite advantage over his competitors.

Some of the rules that will govern the Lightweight class have been drafted and

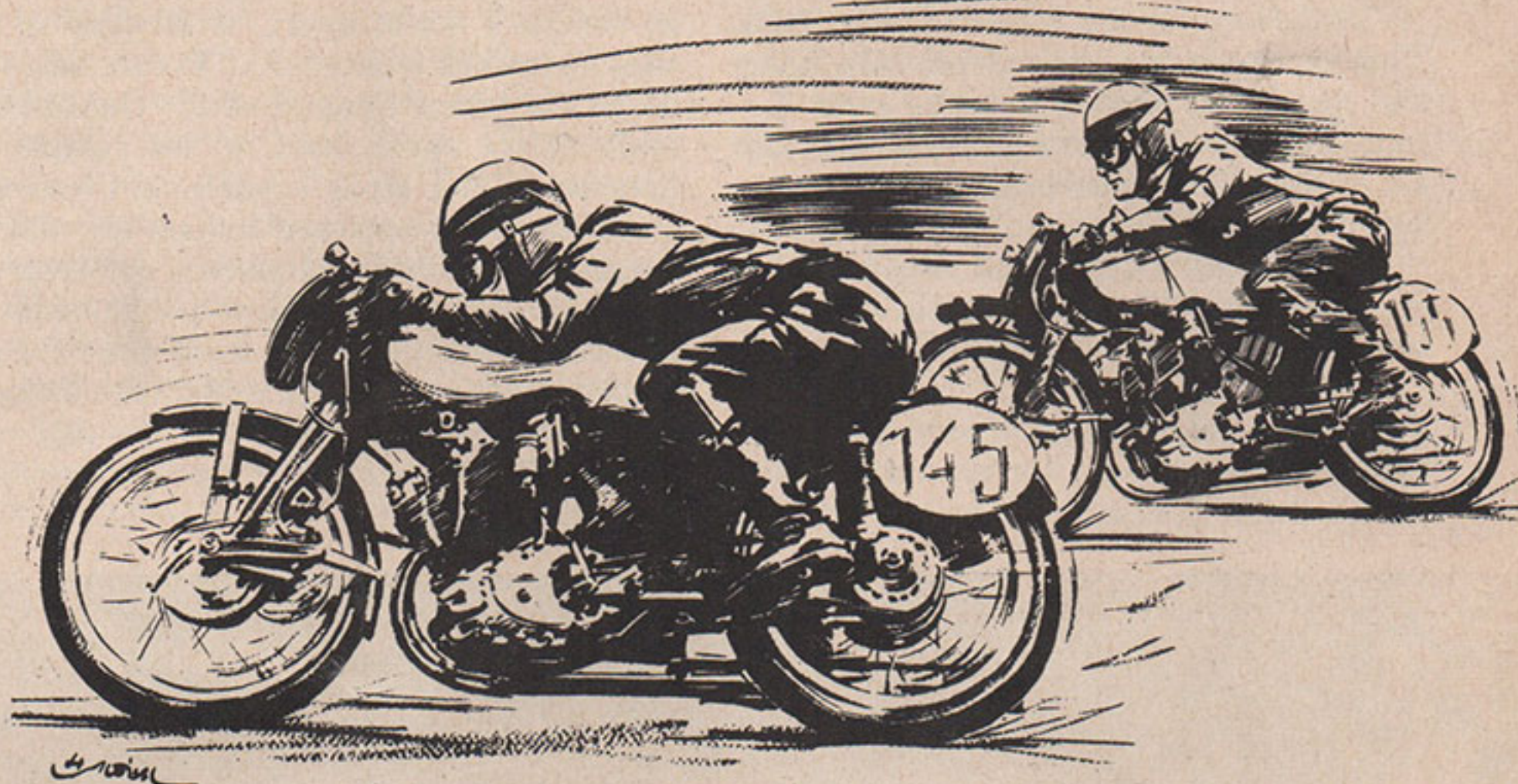
are awaiting official approval. They include: Only machines which have had twenty-five models of similar design and manufacture sold in the United States may be run. Stock stroke and stock bore plus .030 thousands limit on over-bore. Fuel and compression ratio are unlimited. The standard frame can be altered to spring frame etc., but a BSA engine must be run in a BSA frame and a Harley-Davidson engine in a Harley frame, etc. Tires are limited to 2.50 by whatever wheel size you prefer; however, no bicycle wheels are allowed. These rules are only under consideration and are subject to change by the official governing body.

Another bike of considerable promise is Bill Lewis' Junior class Velocette. Ridden by Ray Arnold, it manages to give the boys in the Senior class a bad time. This beauty secured a very comfortable second place in the Junior class at the last Catalina Island race, as well as finishing 21st overall against bikes of twice its cubic inch displacement. It also received the award for the best looking bike at the island meet. Bill's attention to detail and thorough workmanship are apparent. All

condition one would hardly believe that Bill had rebuilt it from a badly bent Velo that had been run over by a truck.

Dick White's unlimited class, 650 cc, Triumph Thunderbird is most representative of the Grand Prix type of bike. The engine, modified by Jimmy Phillips at his new shop, is built for high power output. Engines of this type are being made to put out from 52 to 55 hp at the rear wheels, which compares very well with the best that Europe can get from her

30 mph in a few hundred yards requires brakes that stick around. Therefore, the front brake backing plate was drilled and fitted with an air scoop to deflect cool air into the drum and onto the lining. The shift lever has been reversed on its shaft and a close-ratio gear box is used. With a box of this type all four gears can be made use of. Extreme caution must be used to prevent rpms from going below 4500 as the low gear on this transmission is about equal to second gear on an ordi-



WILL AMERICA BUY IT?

bolts or nuts likely to vibrate loose during a hard race are safety wired. Even the retaining bolts on the rear sprocket are wired. Brake pedal and foot change lever have been moved back, enabling the rider to change gears or brake without moving from his crouched position. Nineteen inch alloy wheel rims and 4.00 x 19 inch Pirelli racing tires are used front and rear. Stock brakes are used, as they are of very generous proportions and have given no evidence of brake fade during any of the previous races. Velocette has been successful at the Isle of Man for many years and stands an excellent chance of being the hottest contender in the Junior class road races here in the United States. To look at this machine in its present polished

500 cc Grand Prix racers. The machine was built to conform to class 'C' specifications and runs 8.1 compression ratio. Dual carburetors are used with dual float bowls mounted ahead of the carburetors themselves. This was done by means of a 4140 steel manifold block to which they are mounted. It was found necessary to mount the bowls ahead of the carburetors, since, when suddenly braking from high speed as when approaching a slow corner, the fuel surges into the carburetor (with the ordinary setup), making a flat spot in the acceleration, when leaving the corner. High lift camshafts, for higher top-end performance, are also employed. The whole engine has been polished inside, and the rocker arm levers have been lightened and brightened. All moving parts, including the gears in the transmission, have been "shot-peened" to lessen chance of fatigue. Smaller diameter exhaust pipes are also attached.

Dick uses special nylon cord motorcycle racing tires because it was found that at speeds of over a hundred miles an hour an ordinary tire will grow as much as four and a quarter inches in diameter. The front forks were strengthened, to lessen twist under severe braking, by increasing the length of the upper tube bearings to two inches and the bottom bearings to one and a half inches. Heavier oil in the shock absorber chamber prevents bottoming on hard jolts. Perfect brakes are a must on a machine of this type, dropping from around 112 mph down to 20 or

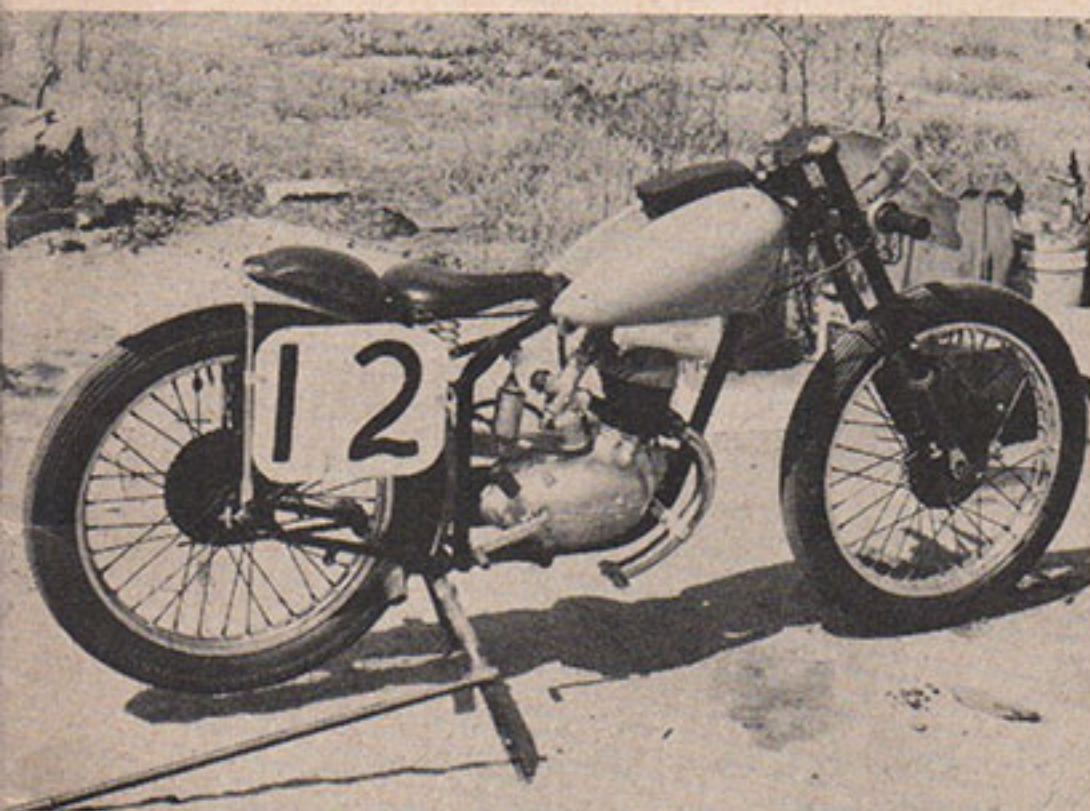
nary box. A good tachometer is an absolute must in modern road racing, it being too difficult to tell the rpms by the sound of the engine because funnels change its tone completely. Jimmy Phillips says the safe range of rpm on his Triumph lies between 4500 and 7200 rpm and although he has on occasion reached 7600, he does not recommend it as a safe practice.

When asked what his advice was on the best way to win a road race, Phillips, twice winner of Torrey Pines races, modestly answered:

"I can't set myself up as an authority because I haven't had too much experience yet. However, here is the way I go about it. First and foremost I make sure my bike is in tip top condition. I leave nothing to chance, and I don't like to have to re-do something in the pits that I should have done properly in the shop at home. I try to get a good night's rest before a race so I don't come to the track all worn out before I start. Practice is one thing you can't get enough of, so I try to be on the track during as much of the practice period as possible. Here is when thorough workmanship and preparation pays off. You can practice while a lot of the fellas are fiddling with their bikes in the pits because you did your fiddling with carburetion, plugs, etc., in the shop.

"During practice try to remember each and every curve on the course; try to spot something you can use as a cut-off point just before a curve. The important

(Continued on page 31)



Don Evans' Bantam is hit of lightweight group. Bobby Michael finds stub handlebars just long enough to consistently turn up victory lane

BATTLE IN THE CLOUDS

Austrian Alpine Trail—A 5000-Foot Challenge to the World's Best Climbers

By F. H. Baer

Photos by Kurt Wörner

CARINTHIA, THE SOUTHERN-most province of Austria, served as the back-drop for the Annual Alpine Trial. This year's contest enticed 106 solo riders and 19 sidecar outfits from all over Europe; for it was to serve as a final checkup on riding ability just before the International Six Day Trials.

The two day Alpine Trial, organized annually by the "Oesterreichischer Automobil, Motorrad und Touring Club" was to cover a distance of 387.1 miles on the first day, with altitude changing repeatedly. The course of the second day led over a distance of 208 miles; the greatest

variance in altitude being 3,987 feet.

This competition, the top annual event in Austria's motor sport, is labeled as a trial instead of a race. Graf Pachta-Raynhofen, Secretary General of the OeAMTC said: "Most cycles used in this competition are tuned stock models, not racing machines. They are used in everyday life, the riders are strictly amateurs or factory men. The course leads over public roads, and riders must bear in mind that their first duty is to obey the traffic law. These features establish the fact that the Alpine competition is according to the sports code of the FIM.

No cash awards await the winner; riders who finish the competition receive either a gold, silver, or bronze medal, according to the record achieved. Among the special prizes, the Silver Edelweiss is awarded the best man in the inter-course speed and mountain climbing trials, while the best solo cycle and sidecar drivers receive the most sought after trophy, the Alpine Pokal.

Divided into two groups, solo and sidecars, and into classes according to the engines' piston displacement within these two groups, specific minimum speeds were required for the distances between the first day's nine, and the second day's five time control posts, the two speed trials, and the mountain speed test.

The actual grouping and classification was laid down as follows:

A GROUP (SOLO CYCLES)

- Class 9 (for 500 cc, 750 cc, and 1 liter) above 21.33 cu. in.
Class 10 (for 350 cc) up to 21.33 cu. in.
Class 11 (for 250 cc) up to 15.26 cu. in.
Class 12 (for 175 cc) up to 10.68 cu. in.



Reliability run was in accordance with strict regulations. One rider fell. An Austrian policeman wanted to help, remembered in time that rider is disqualified when aided by bystander

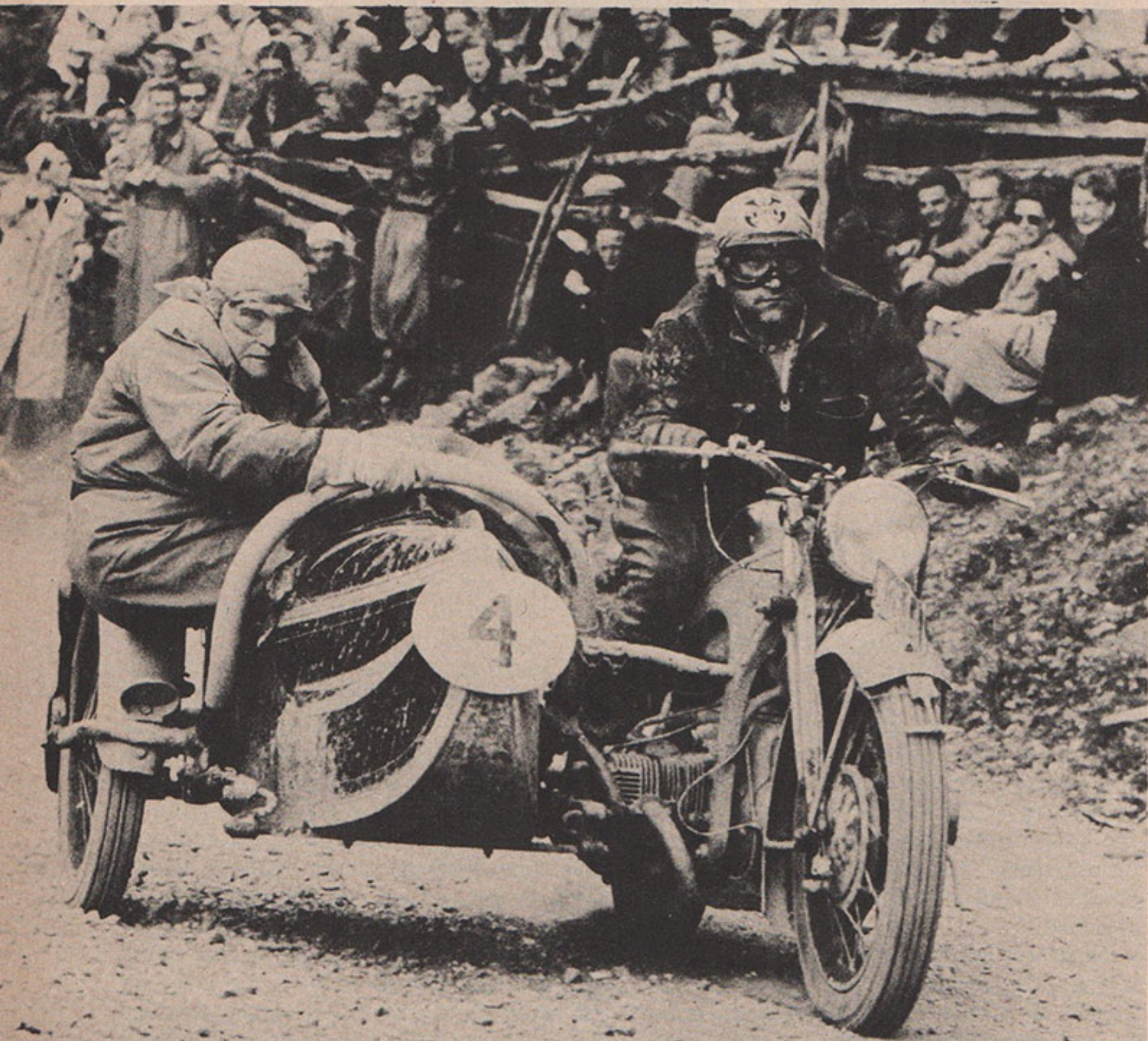
- Class 13 (for 50, 75, 100, and 125 cc) up to 7.62 cu. in.

B GROUP (SIDECAR CYCLES)

- Class 6 (for 750 cc, and 1 liter) above 30.51 cu. in.
Class 7 (for 500 cc) up to 30.51 cu. in.
Class 8 (for 350 cc) up to 21.36 cu. in.

The required total time allowance for the first day, for example, varied from 15 hours and 27 minutes (with 27 minutes plus/minus allowance, three minutes at each of the nine time control posts) for class 8, up to 12 hours, 42 minutes (with the same allowance) for the fastest classes, 9 and 10.

LEFT, "Get out, Mama, there's a bad one ahead!" It's hard to believe, but true. The Viennese, Otto Keck, has relied on his capable 62-year-old mother for years as an expert sidecar hand in the most grueling cross-country cycle competition



While earlier arrival at a time control post was punished by a penalty equivalent to \$4.00 in Austrian currency for every minute, later arrival than required in the timetable was noted with one negative mark per minute on the starting card.

The results of the speed trials and the mountain speed test were marked on the starter cards when the required time was exceeded; one negative mark was put down for every minute of tardiness beyond the required time, the marks counting towards the final result.

Above this, as the aces' ace reward among the motorcyclists, the Alpine Pokal was awarded the best driver in the overall group, thus selecting one top winner in both the solo and the sidecar groups.

Tough technical inspection with marking and lead seals was executed before the trial; top-notch engineers of the Austrian Automobile, Motorcycle and Touring Club, headed by Dr. Gerhard Seidel, of Vienna, checked the cycles thoroughly, to insure safe driving and conformity of regulations with the entries.

Commissioners painted marks on frame, tank, wheels, tires, brake drums, chain,

cles took off for the ride they won't forget in a long while. During the first 50 miles, comparatively good roads allowed some speed, but a muddy, rain-soaked stretch of about 30 miles created the first difficulties; so many, in fact, through the hilly regions between Friesach and Twimberg that no single rider could keep within the time limit—forcing the OeAMTC to neutralize this part the next day.

After a relatively well-paved span of a few miles, riders gunned their engines up to 5,000 feet above sea level, through stone-covered forest paths, to reach Zeltweg in the early morning. Here they completed the speed tests, which the German master, George (Schorsch) Meier, won at a top speed of 90.5 mph, far ahead of Denzel (Austria) and Zeller (Germany), both driving their 600 cc BMWs exactly 80.30 mph. In the class of the sidecars, Germany's Victor Wiggerl Kraus topped the list with his BMW, followed by Kritter (Zundapp KS601) with 71.5 mph.

Starting in the 350 cc class for sidecars, Ondreas of Austria, driving a Horex Regina, was the winner, breaking even with the German, Ebert, on a Victoria 250 cc;

Driving his Maico 175 (a German newcomer in the manufacturing field) he topped many an experienced Austrian driver on Puch, including internationally known men such as Cmyral, and Beranek.

In the class up to 125 cc (7.62 cu. in.) the Austrian Puchs filled all spots in the upper list, with the exception of the German Triumph's sixth position.

CYCLES IMPOUNDED OVERNIGHT—DRIVERS SLEEP 12 HOURS

The speed test was only the half-way mark on the first day; 12 more upgrades of more than 15% and more than 100 miles were to be driven before the finishing line at Velden was reached.

After a short technical inspection on the cycles, the vehicles were impounded overnight and the drivers disappeared as fast as their stiffened legs allowed.

During the evening, Dr. Seidel, a real specialist in motorcycles, explained some of the technical difficulties in Alpine driving.

"Every cycle's engine is robbed of up to 25% of its nominal power in higher altitudes," he started to explain, "because of



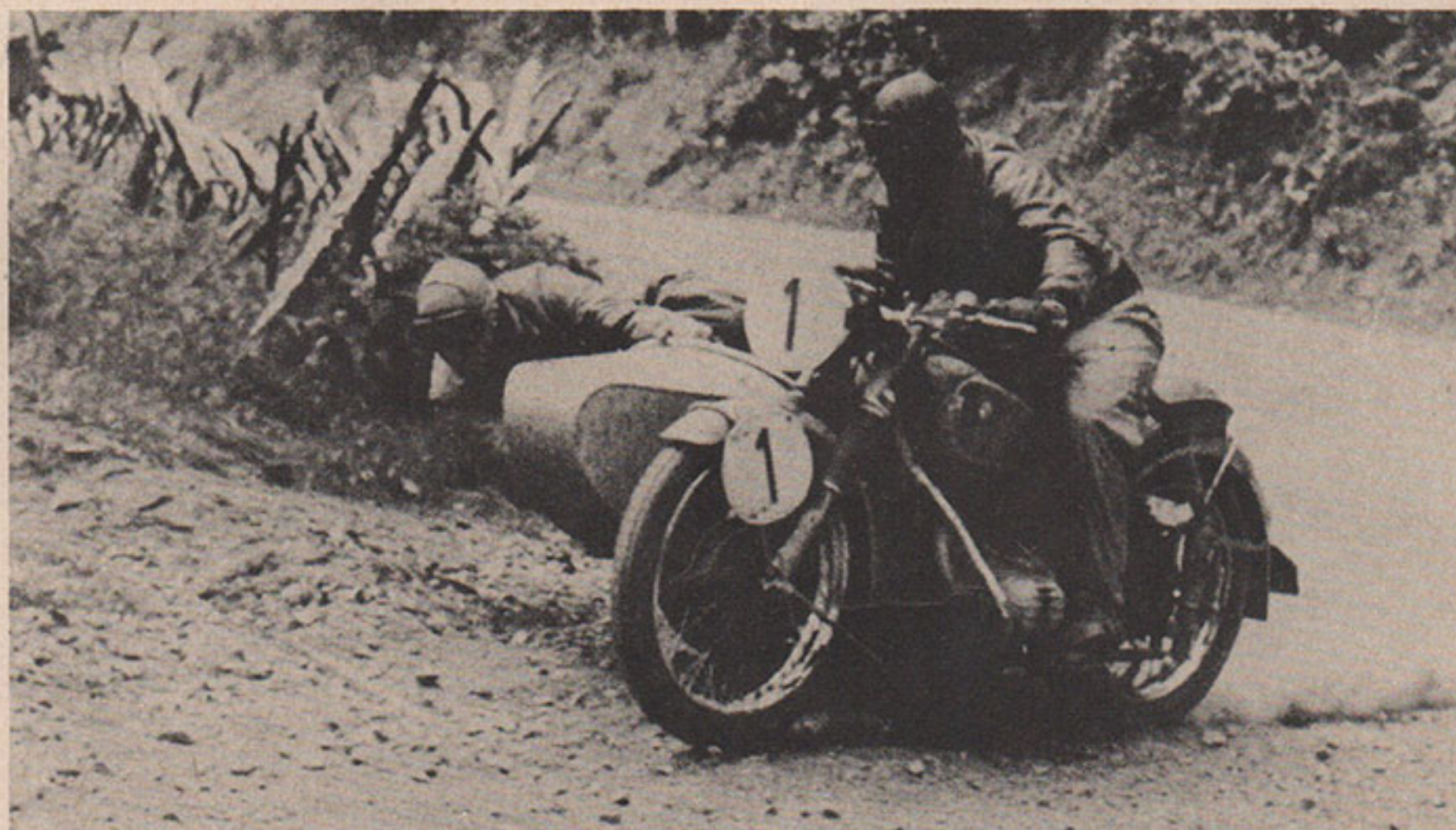
No one expected that a 175 cc two-stroke would capture the highest honors of such a difficult run. Hans Dangler on a Maico is shown here on his way over the mountains to Turracher Heights

transmission case and lid, foot rests, carburetors, magnetos, or distributors, with white paint, signing these marks with indelible ink. All spare parts declared to the commissioners were also marked with white paint, and regulations made sure that all listed spare parts—the ones which were exchanged for defective parts, too—were carried all the way, even though being of no further use.

Then the cycles were impounded until 15 minutes before the start, which took place in streaming rain at 2:00 AM.

ENTHUSIASTIC CROWD SEES CONTESTANTS OFF

Disregarding the pouring rain, a big crowd watched the start. The 600 cc cycles, with Denzel, Meier, Roth, and Zeller starting first, the German Horex, then the British soldier-driven Matchless following. Later, the slower, smaller solo cy-



The well known German BMW racing star, Wiggerl Kraus, rode in the sidecar class of over 30.50 cu. in., topping the list in this group. His reward was an Alp cup, a gold medal and the coveted Edelweiss. His passenger is completely out of the sidecar, quite a trick in rough going

Max Klanckermayer, Germany, driving a 500 cc BMW, averaged 31.2 mph, followed by Viennese Zabokrcy's 500 cc BSA.

Second fastest in the class 9 solo cycles was famed Wolfgang Denzel of Vienna, who finished as the only man in his class (at the final count) with no negative marks, thus exceeding the record which the German ace Meier was able to achieve.

Fastest driver in the class up to 30.51 cubic inches piston displacement, was Oelrich's Horex, with 68.81 mph, followed by two other Horexes (the three which were later to finish first, second, and third in this class.)

The winner and the runners-up in the test of the 15.26 cu. in. solo cycles were Austrian Puch motorcycles.

Hans Dangler, Germany, the one who later won the top honors for the entire solo cycle group (receiving the Alpine Pokal), finished as the fastest man in the solo class up to 175 cc (10.67 cu. in.).

the intense air pressure farther up, which only partially fills the combustion chambers, and thus lowers their filling with the required fuel-air mixture.

"Regardless of size, all non-supercharged (and only such cycles were entered) engines get only 78% of the required air through the carburetor at 5,000 feet above sea level, while the volume of vaporized fuel sucked into the combustion chambers remains about the same.

"The loss in the amount—and the change in the ratio—of the fuel-air mixture results necessarily in the loss of effective horsepower. At sea level, the engine's power out-put is considered at 100%, dropping to 89% at 3,300 feet above sea level, and to 74% at 6,600 feet, reaching a lowest point of 60% at a level of 13,200 feet above the sea.

"The loss in horsepower, in turn, affects the HP/weight ratio making the vehicles

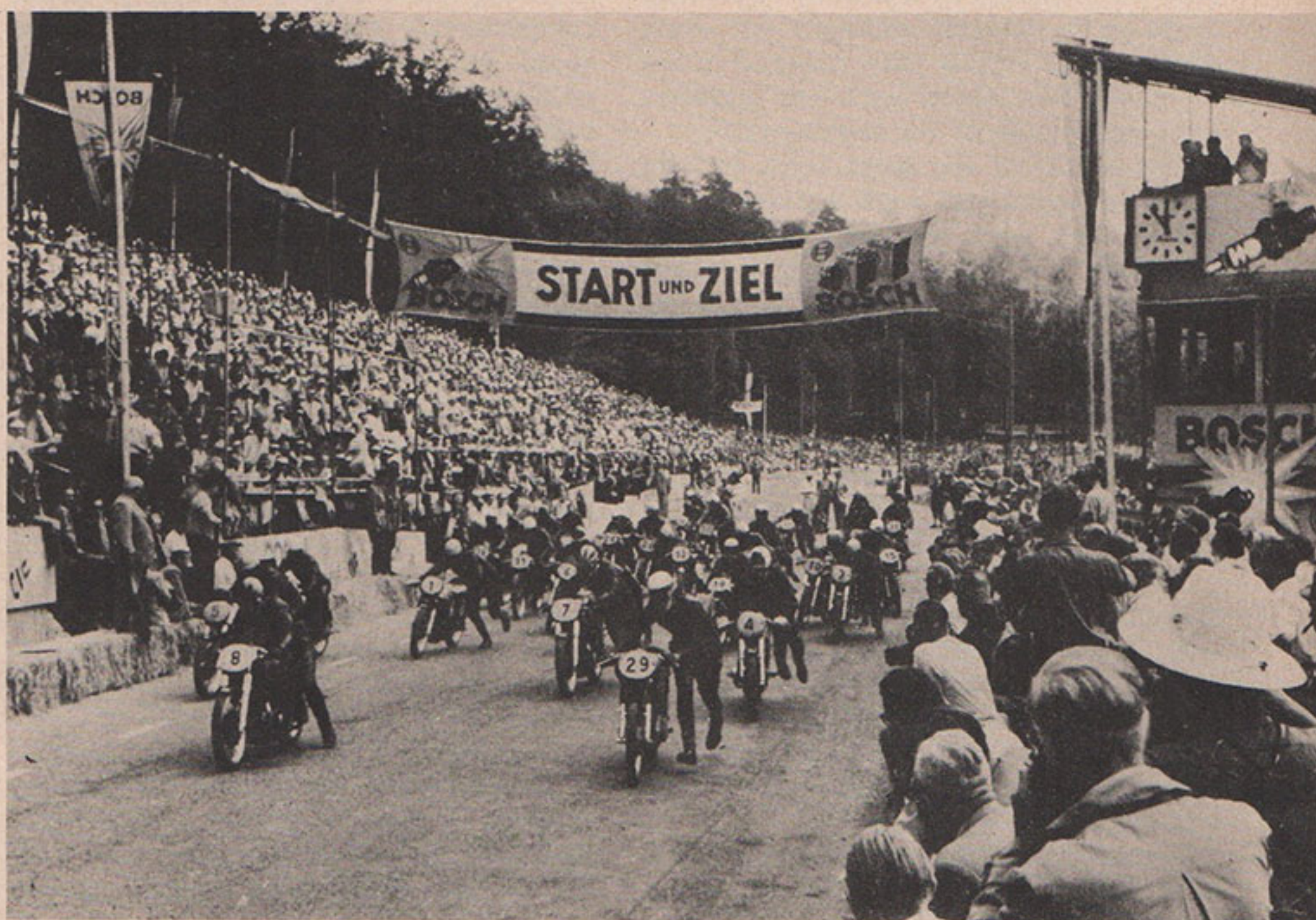
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GERMAN GRAND PRIX

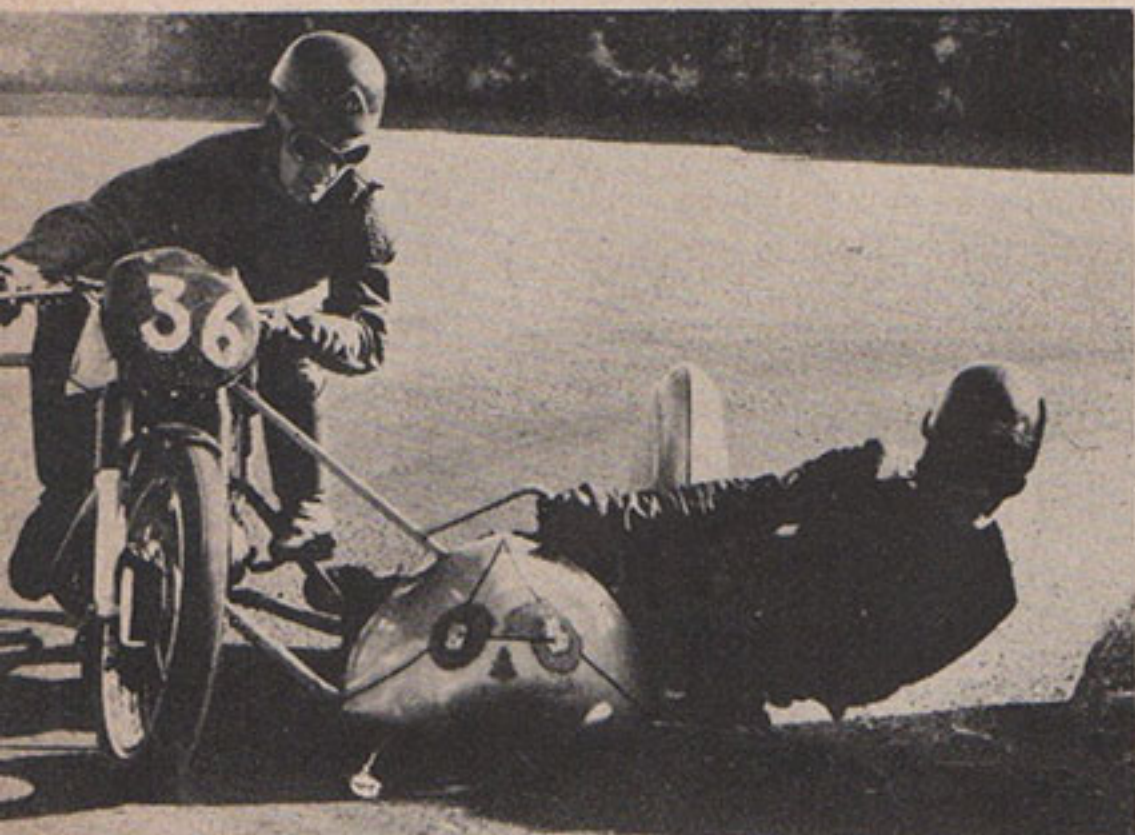
The Slipperiest Circuit
This Side of Eternity

By

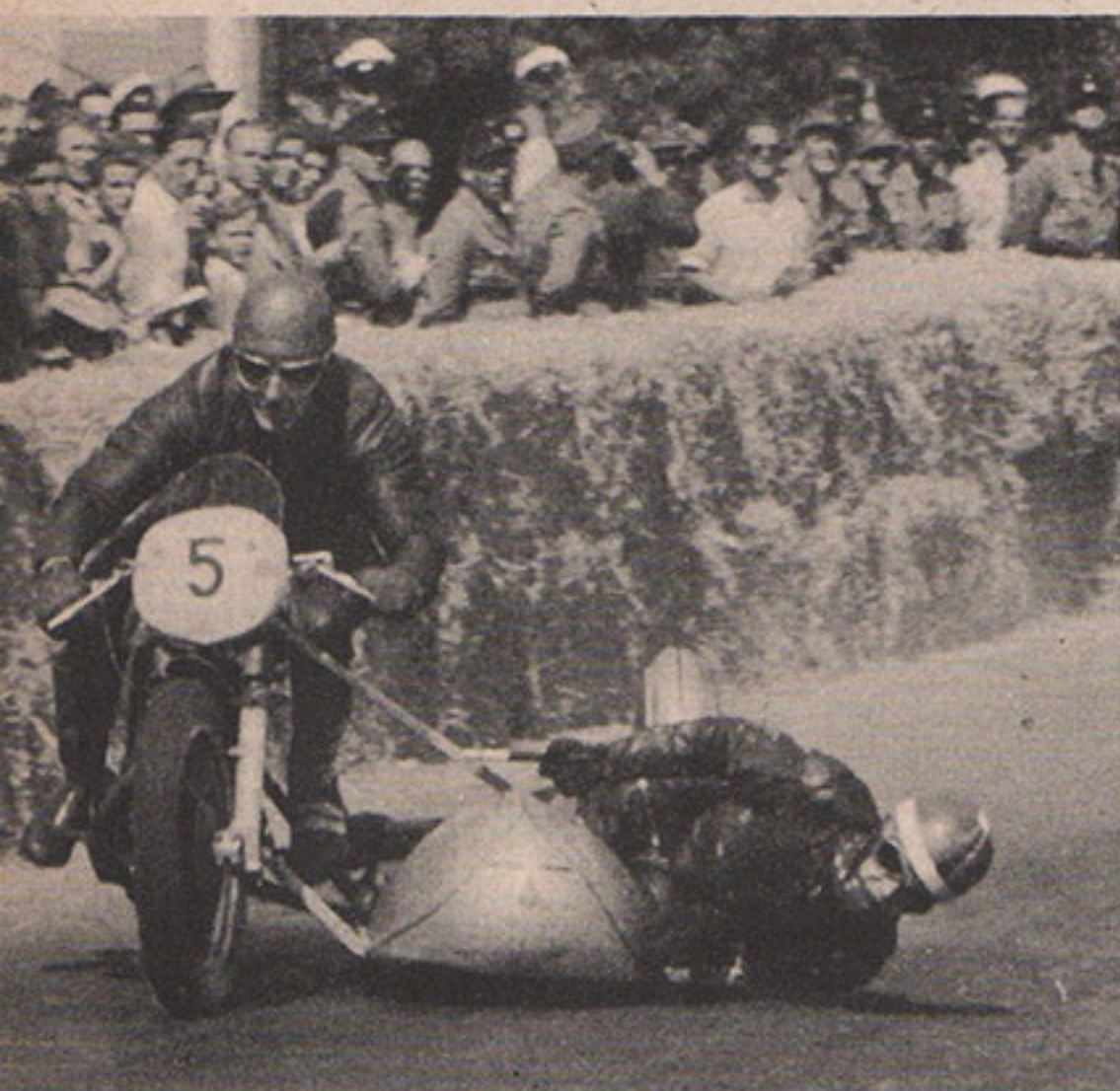
George Glaser
Rodolfo Mailander
William Onslow



European racing law demands that you must first walk before you ride. "Bump" starts are actually found to be safer, for they allow riders to space out before starting engine and mashing throttle



Bill Onslow takes job of reporting seriously. Proximity to track does wonders for pilot Drion's peace of mind, keeps CYCLE readers posted



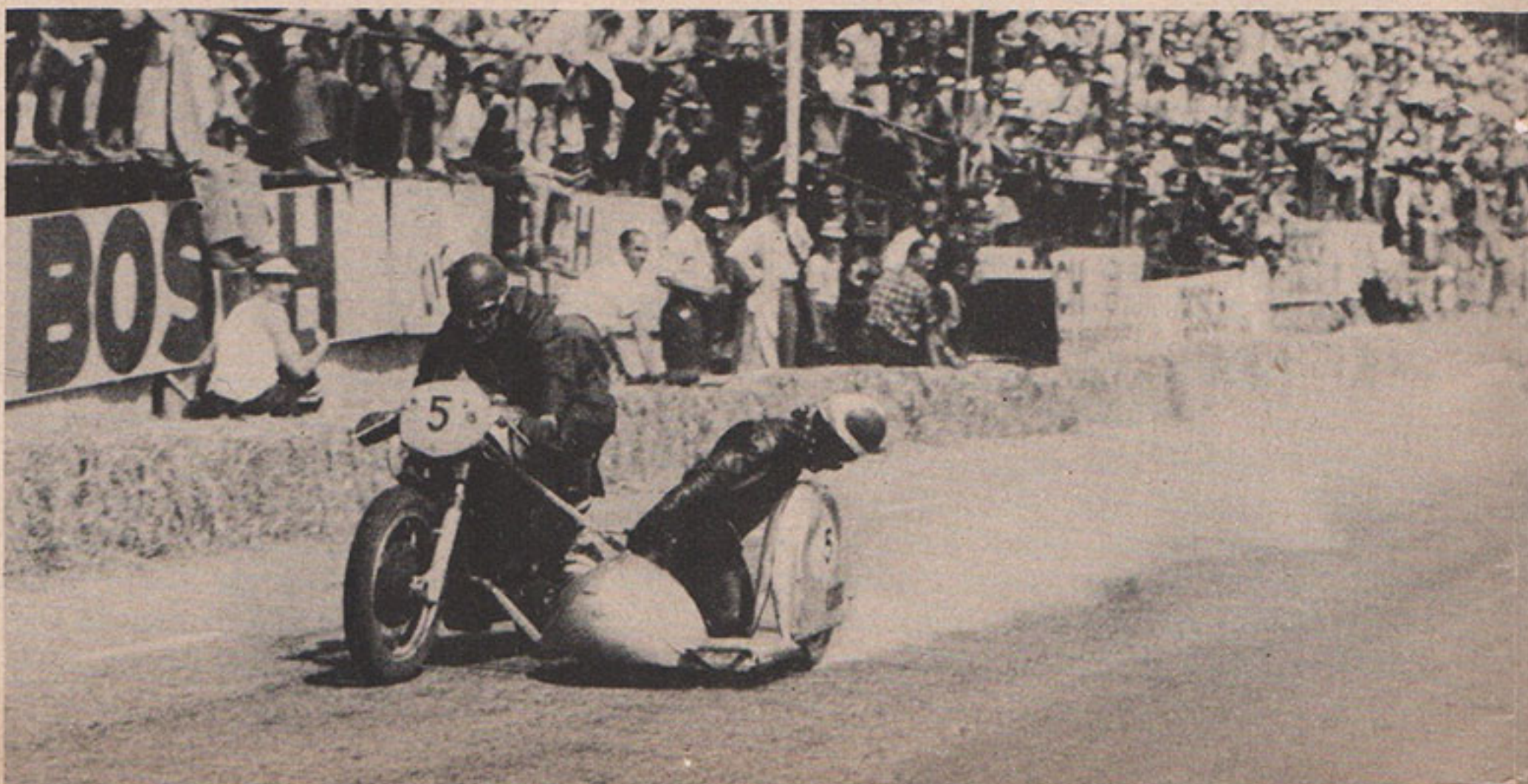
The master in double trouble. Sidecar champion Eric Oliver can handle a scorching broadside (ABOVE), but was finally forced to a halt as he bitterly tried to drag his broken sidecar over finish line (RIGHT). Note Olie's taped legs, not yet fully knit from bad crash only weeks before when he and passenger were hospitalized

A GIGANTIC motorcycle fiesta . . . No less spectacular words could describe the German Grand Prix. It was Germany's first international post-war championship and it called the hands of the world's finest motorcyclists. Held at the Solitude circuit near Stuttgart in the American occupation zone, the Swabian metropolis almost disappeared under the tide of half a million thrill-thirsty Germans bent on making this the most memorable motorcycle meet the country has yet known. From the surrounding hills, on the night preceding the race, the town reminded one more of New York's Times Square than a picturesque German village. The main street was blocked to all motorized travel, given over to the festive spirited fans, some of whom danced in the street, while others jammed the cafes until the early morning when they began to disappear for a favored spot at the track.

The weeks prior to this fifth contest in the international series had been dark ones

for many countries. Tragedy had robbed Belgium of its fine sidecar ace, Frans Vanderschrick, champion of his country for 23 years. Holland had lost its wonderful solo rider and National Champion, Van Rjyswyck, and even the United States had forfeited dashing short track star, Ernie Roccio, killed while racing on England's short track circuit. British king pins Geoff Duke and Bill Doran were out of the running from injuries sustained in previous crashes, as was Norton rider Ray Amm of Rhodesia. The Gilera teamsters, Alfredo Milani and Umbero Masetti, had just wiped out two of the four cylinder beauties in pre-race tumbles, making it one of the blackest days in Italian racing history.

The Solitude circuit is conceded to be the slipperiest seven miles (actually a little over that, at 11.5 kilometers) in the international group; and while many may feel that the track itself was to blame for the numerous crashes this day, we are





The fire of the Spanish Montesa two-strikers is matched spark for spark by these spontaneous natured Latin team-mates who competed for world honors in the highly developed 125 cc class

not of this opinion. A few years back, riders seemed equally fast but always seemed to be riding with a certain margin of safety. Now, only one factor remains—that of sheer speed—with the inevitable results. Racing in Europe has become critical and tough, but the riders themselves have made it so in an attempt to equal better men and machines.

At 9 a.m. a sound much like that of machine gun fire split the wooded area as the snarl of 125 cc machines heralded the approach of the super lightweights. Leading the pack over the finish line was the young NSU rider, Haas, on one of the new dual overhead cam racing Foxes. The average speed was 73 mph.

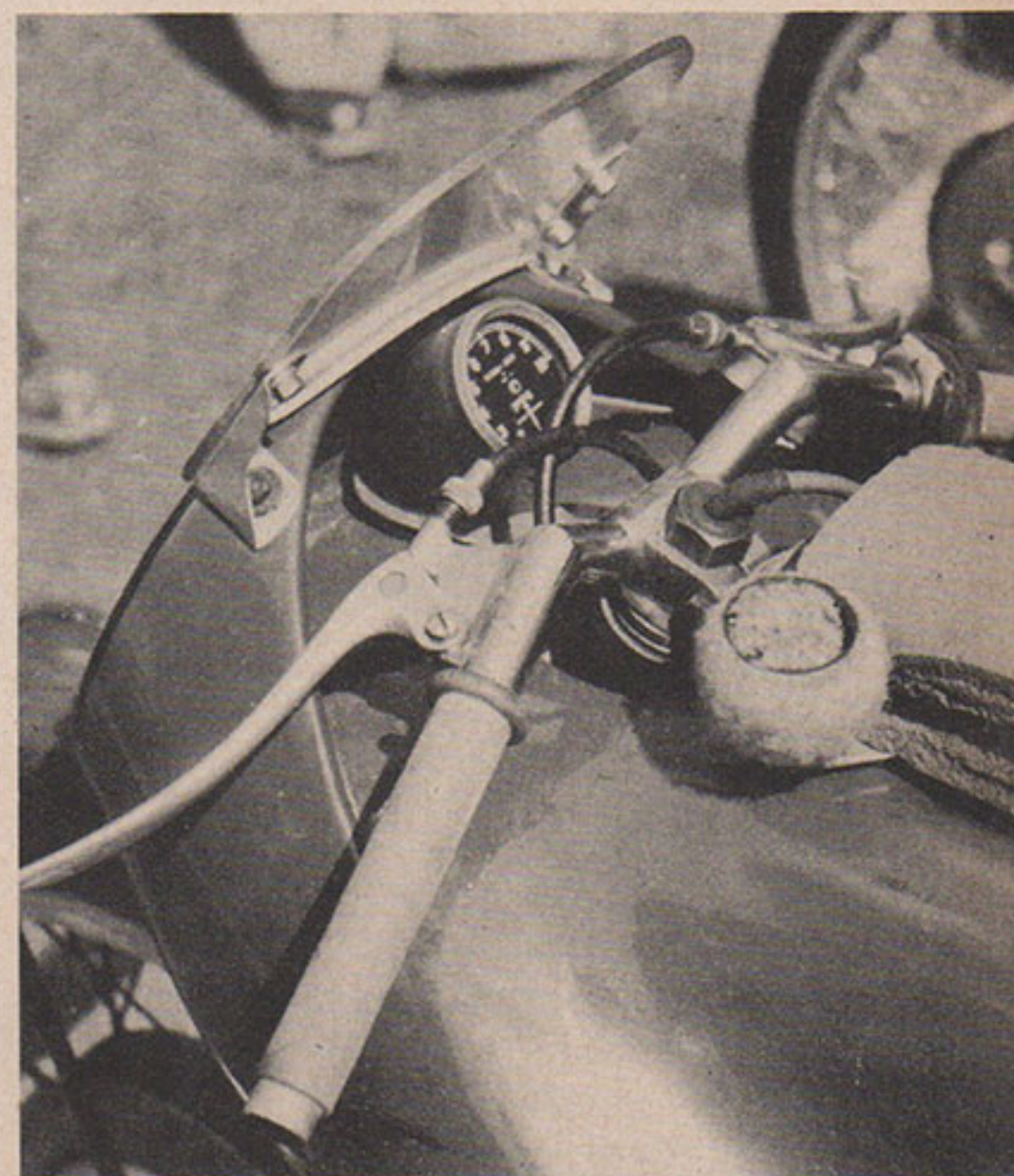
In the 250 cc class, the Moto-Guzzi works machines of Ruffo, Lorenzetti and Anderson were dominating until two of the Guzzis tangled and went down in a dramatic spill. Minutes later, Bill Lomas, NSU's newly adopted son whose rise was predicted last July, saw his hopes ground-

ed when his engine began to sputter from a fused pushrod. This left the gate open for Rudi Felghenheier, another new rider for the DKW factory, a branch of the Auto Union Corporation. Rudi had been trailing on a very smooth running, new two-cylinder, two-cycle DKW and took advantage of this chance of a lifetime to win the race against heavy odds.

The 350 cc event, of nearly 100 miles, again meant bad luck for Bill Lomas, this time on a triple camshaft AJS. While tailing first place man, Jack Brett, Lomas had the misfortune to see Brett, also AJS, slide to earth in front of him. Lomas spilled into his teamster and lost valuable seconds before getting underway again, finally overcoming most of his handicap by doggedly working his way back up to third place behind the two Nortons of Australian Ken Kavanaugh and Irishman Reg Armstrong. With the pressure on, Lomas had established a new class lap record of 83 mph. In fifth spot was Ewald

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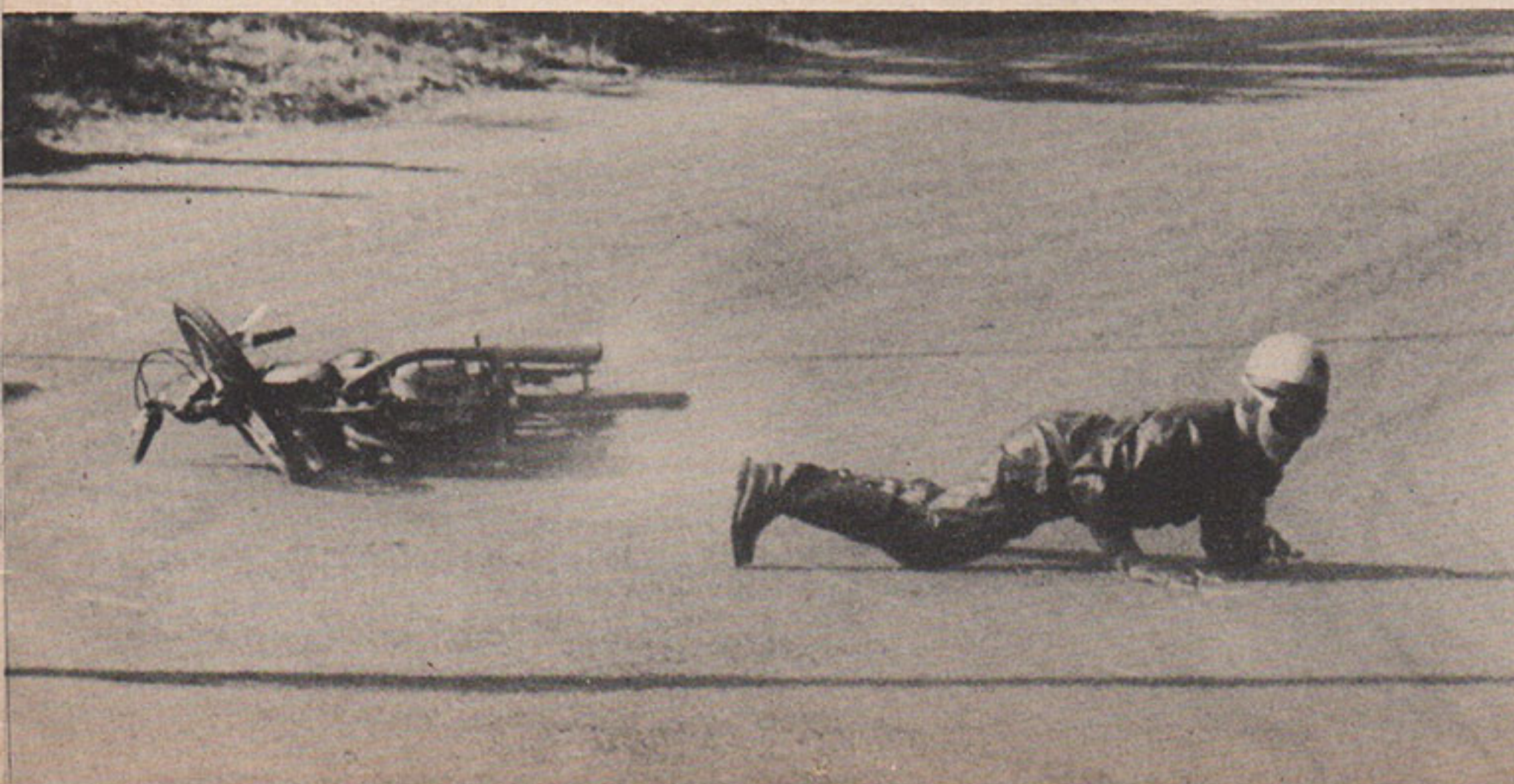
Photos by
Mailander, Wörner



Lorenzetti's quick-firing 15 cubic inch Moto-Guzzi was equipped with a damp sheepskin dauber against which he could clean goggles while flat-out on tank without removing hands from bars



ABOVE, Behind mask is sidecar ballast Clements who takes extra precaution since charioteer's face is usually only inches from ground on an inside turn. Europeans permit the hack to be mounted on either side of the motorcycle



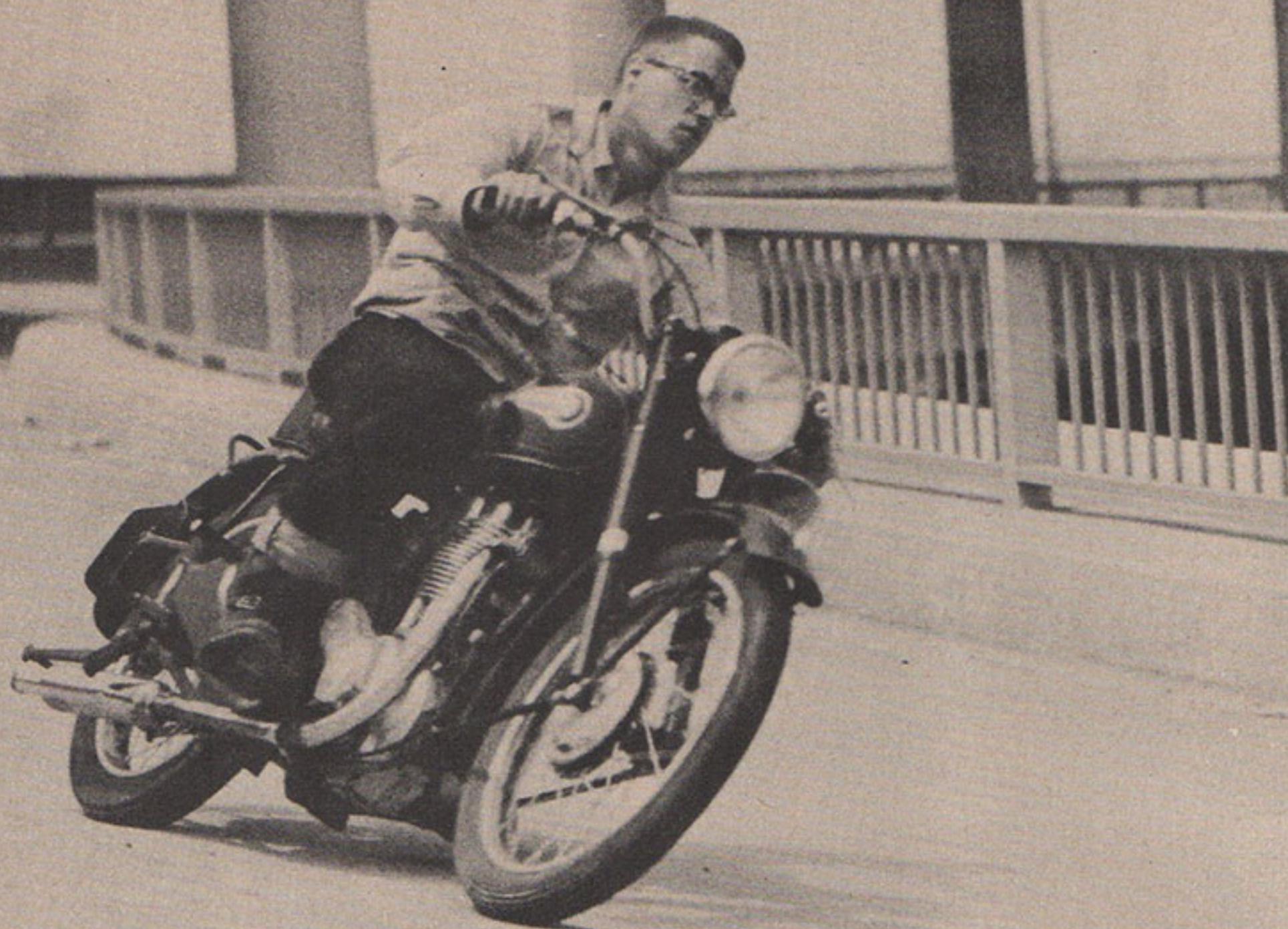
LEFT, One good reason for wearing gloves. Occasionally the contestants got off and crawled around on the pavement for a while. Herr Sturzt spun out in the exciting 125 cc event

ARIEL'S

NEW ALLOY SINGLE IS TAKEN OVER THE HURDLES

BY BOB GREENE
EDITOR

Photos by Felix Zelenka



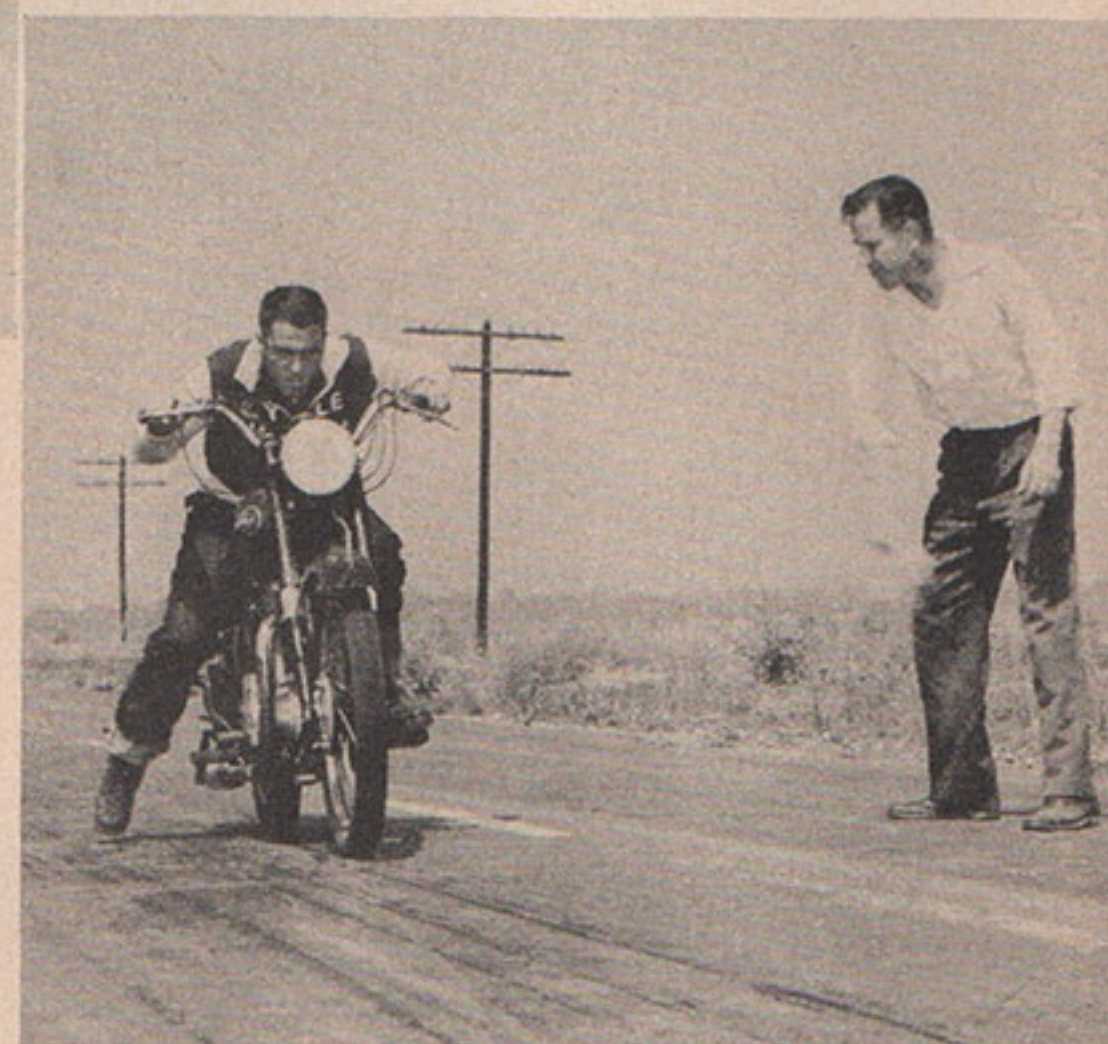
Peeling rubber (off the footpegs, that is), on the beautiful, new, yet unused, Los Angeles freeway clover leaf. Most people I talked to agreed that both the Ariel's handling and springing were good

SINCE THE BEGINNING of motor-cycle time, the single cylinder machine has flourished then faded, only to reappear, apparently with as much zest as ever. To say that its continued popularity is based on simplicity of design alone would be misleading, for as we are well aware, the thumpers are more than holding their own in high speed competition the world over. Keeping pace with the "multis" in an age of ever-demanding performance is a colossal task; one that has been admirably handled by Ariel Motors, of England. Of their entire line of five models (three singles, a twin and a four), the 500 cc single cylinder, Red Hunter VHA model is claimed their "Ideal sports machine," a title most recently substantiated by its capturing of the Pacific Coast Championship Endurance Run.

While 500 miles is but a fleeting moment in the average life of a motorcycle, it did give us an opportunity to lay the whip on pretty hard, making certain of one very important fact: its engine is noisy but tough. The excess engine music is easily accounted for in view of the alloy cylinder which unfortunately radiates sound with the same ease that it does heat. The staying qualities of the engine, however, require a little more elaboration. You can bet your last master-link that few riders would subject their bike to a typical acceleration test, and wisely so! With the machine at a dead standstill, in low gear with the clutch disengaged, the engine is revved, bounced higher and higher until the clutch is let fly. The resulting strain imposed on engine and entire drive system is tremendous, but it does allow the rear wheel to break loose, thereby keeping engine revolutions within their most effi-

cient range. Immediately after starting, the throttle is feathered back until wheel spin is minimized and forward momentum and rpm meet somewhere down the road. After three blistering practice starts, the Hunter would no longer break loose and minutes later the clutch lever had lost all its action . . . our day was done.

The engine had stood the shellacking exceptionally well, burbling sweetly as ever, and by backing off the clutch adjusting nut at the transmission, we were able to ride back to shop headquarters where inquisitive eyes soon found the weakness to be in the dry cork clutch inserts. The clutch actuating rod was in perfect order but the inserts had burned black and puffed up, causing both drag and slippage. These same cork inserts are used in many other clutches and seem to work well (as did the Ariel clutch under normal touring conditions). The main difference between Ariel and most others is that Ariel runs their plates completely dry, sealed off from the primary case, whereas popular practice is to run the plates open within the primary case. Oil spray from the spinning chain seems to provide just enough cooling lubricant to keep the corks from frying when the heat is on. It is doubtful that this trouble would have occurred had the inserts been of the woven fibre type; but fibre, conversely, has a lower friction coefficient and requires more clutch spring pressure, making for a stiffer-working hand lever. As a matter of fact, Ariel makes a Feroda plate replacement kit for competition and just such abuse. But for the above reasons it is not recommended for normal riding, since it is not nearly as pleasant as the corks for touring or about town. Under the circum-



When it came time for serious acceleration, the clutch had lost its bite and, flag as he would, Johnson Motors representative, Pete Coleman, couldn't get the Red Hunter to rear up and snort

stances, we installed a new set of stoppers and retired for the day.

Only one other mishap marred our first trip to the test strip. Shortly before pulling up stakes, the compression release plug had unscrewed itself from the cylinder head. Fixing it back in place took only a minute, but fix it you must; for without it, starting becomes quite a chore. There is a knack to starting singles. Actually there are two proper ways and both are most easily done with the aid of the compression release. After bringing the piston onto compression by feeling the kick-pedal through, some prefer to hold the valve open at the beginning of the starting kick, releasing it after the pedal has passed the half-way mark of its stroke. An alternate method is to work the piston just past top dead center on the power stroke, feeling the pedal out with the use of the compression release, then, with the kick-pedal horizontal to the ground and forgetting about the compression release completely, boot the engine through. Retarding the spark about half way, during this procedure, helps a great deal.

IDEAL SPORTS MACHINE

Another function of the compression release, that of shutting the engine off, was found to be inadvisable on the Hunter. When the engine is shut down by pulling the compression release, the mechanism, which is fitted on the left side of the cylinder head, rocks in its seat, allowing fuel vapors to blow by onto the outside of the head. A simpler and cleaner method of killing the engine is by quickly chopping the throttle wide open, letting the engine die from a lack of draft.

According to our tabulations so far, the Hunter had done well at speed, finally working up to 92.3 mph after juggling plugs and jets to suit the occasion. At the start, with a Champion N8 plug and a number 190 carburetor jet, the watches were tripped at 4.28 seconds for the tenth-mile. A plug reading soon showed the electrodes to be sooty and damp. A Champion N8-B was paired up with a 180 and finally a 170 jet with a consequent drop in time to 3.9 seconds. After several runs with this combination we were convinced that "that's all she wrote." Throughout the speed and acceleration runs the engine ran smoothly and powerfully, showing no tendency to fade at the end of the traps regardless of what gear was being used. Low and second speed

readings were taken from the speedometer (allowance being made for error—approximately 8 mph fast in high), since it was too much to ask that maximum revs be held for the distance necessary to obtain an accurate stop-watch reading in these gears. In high gear the power became notably strong above 40 mph.

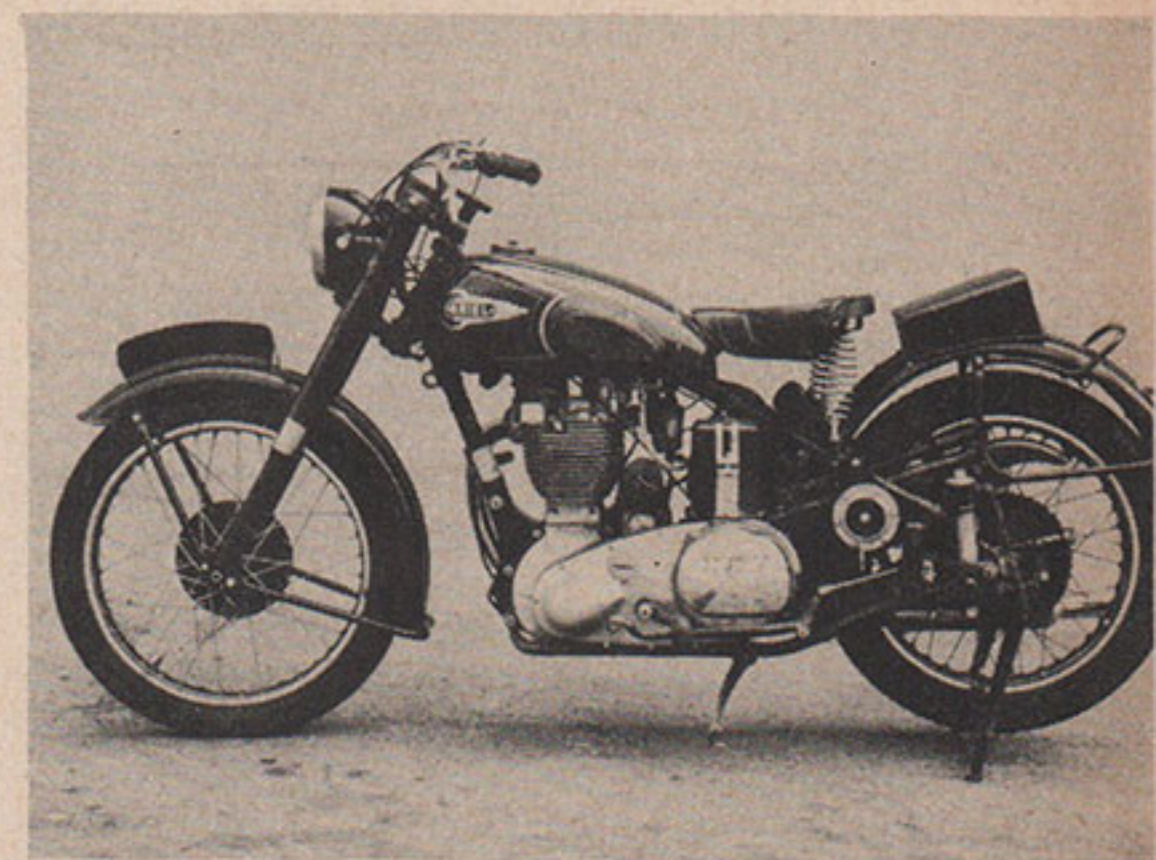
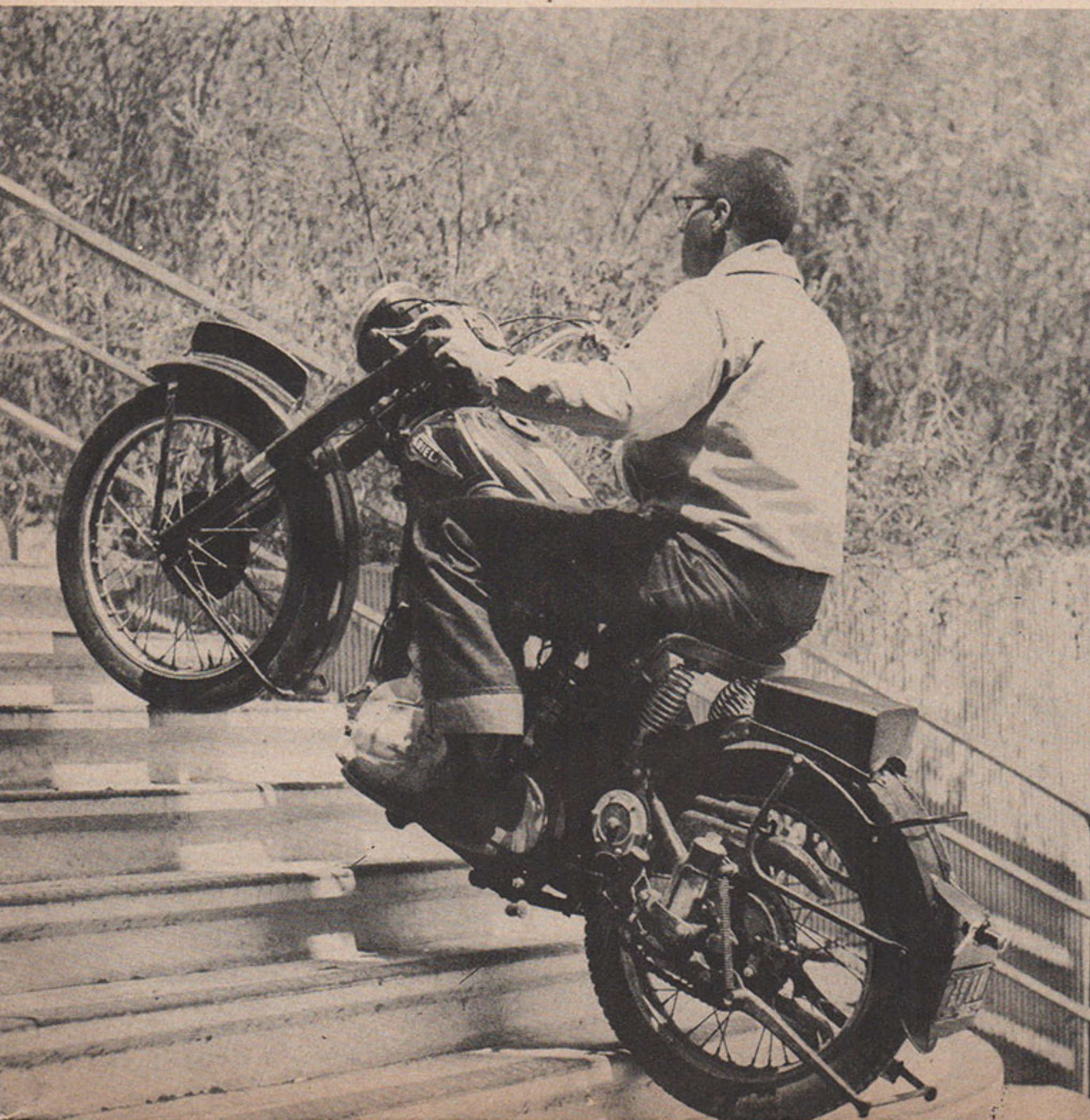
Braking with the Ariel was mediocre, not outstanding for two reasons. The rear wheel could be pulled down nicely but definitely should have more rubber on the ground. While it's obvious that a 3.25 x 19 tire on the rear keeps cost and unsprung weight down, the bike is sorely in need of a wider tread when it comes time to toss out the anchor. A 3.75 or 4.00 x 19 would seem far more appropriate. The 3.00 x 20 front hoop hardly had a chance to perform, since it was the brake and not the tire that was lacking here. Although full adjustment was made after several stops, the front binder just couldn't be persuaded to pull up smoothly and progressively. Lever action was jerky and full pressure at the handlebar produced only a mild effect at the wheel.

But so much for braking . . . the acceleration figures were still to be determined. The following day, with the clutch reinstated, four hard starts were made

without a sign of trouble. Times for the tenth- and quarter-mile were consistent and very good, as you will notice in the performance summary, so we decided not to push the issue. The clutch has since given no indication of slipping and works beautifully.

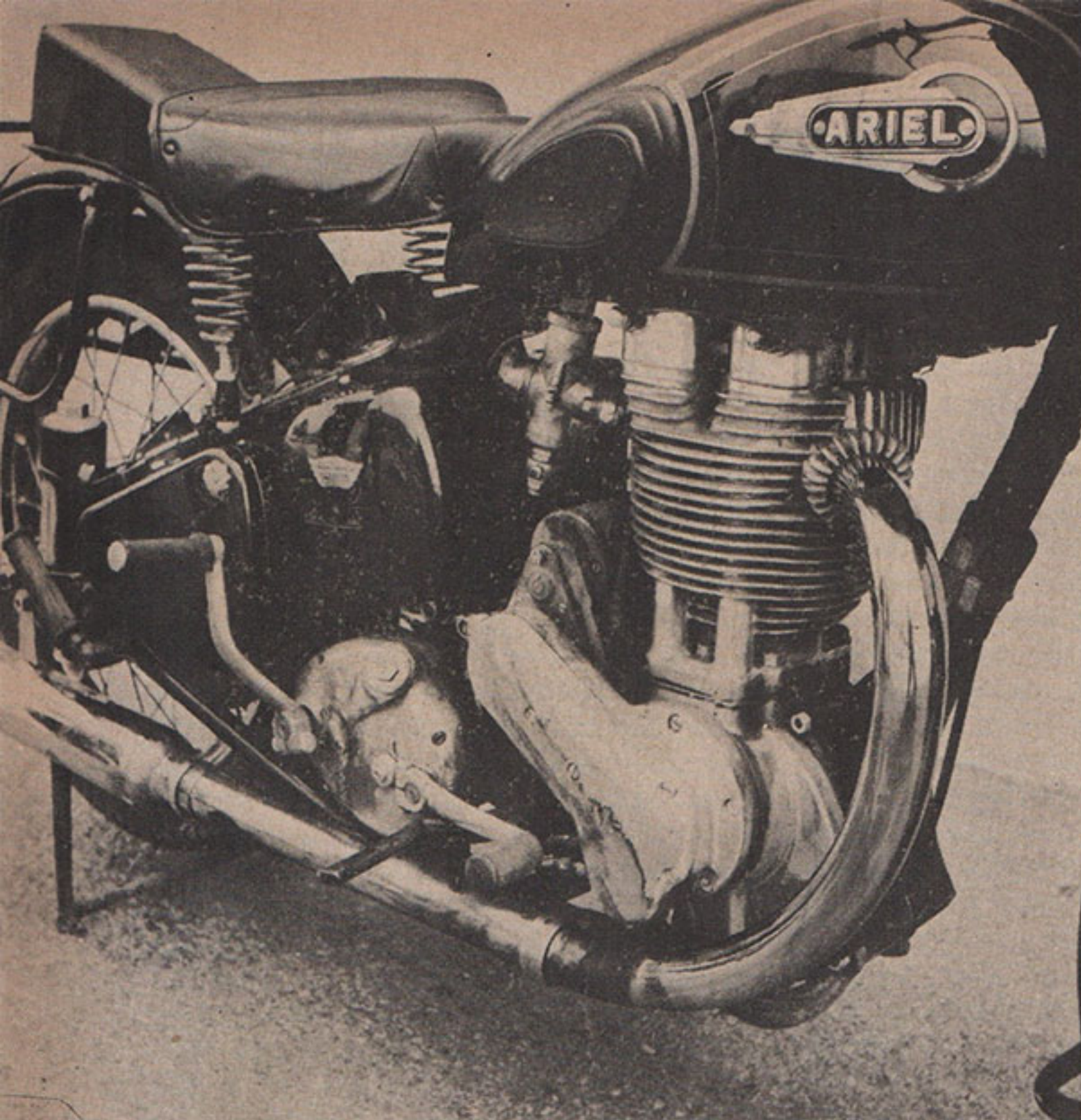
While regular plunger type suspension is still employed on the rear of most sprung machines, the Ariel is actually more than that, and can almost be classed as a modified swinging-arm type. The axle, mounted in stirrups which circumvent and pivot just ahead of the spring tubes, is given greater lateral rigidity and travels in a semi-circular path centered around the gearbox sprocket. The result is that chain tension remains constant at all times, an important condition not true of ordinary plunger type systems. In action, the feeling is somewhat reminiscent of a full swinging-arm suspension, giving a slow deep cushion. It is especially lush when riding double and should be good for long trips with two up. Many riders claim that a full swinging-arm rear suspension is too wishy-washy to suit them, and that the regular plunger unit is too inclined to pitch. If this is your plight, then I strongly recommend that you try the Ariel, for it represents as keen a compromise as there is to be had. I have no quarrel with this system except to hope that it might some day incorporate oil dampening, for it did bottom out on the hardest dips.

At the other end of the frame, the forks were also guilty of bottoming; but this, of course, can be easily remedied by the use of heavier oil. Only on extremely fast, wavy surfaced corners did the bike show any sign of bobbing about. Fork angle
(Continued on next page)

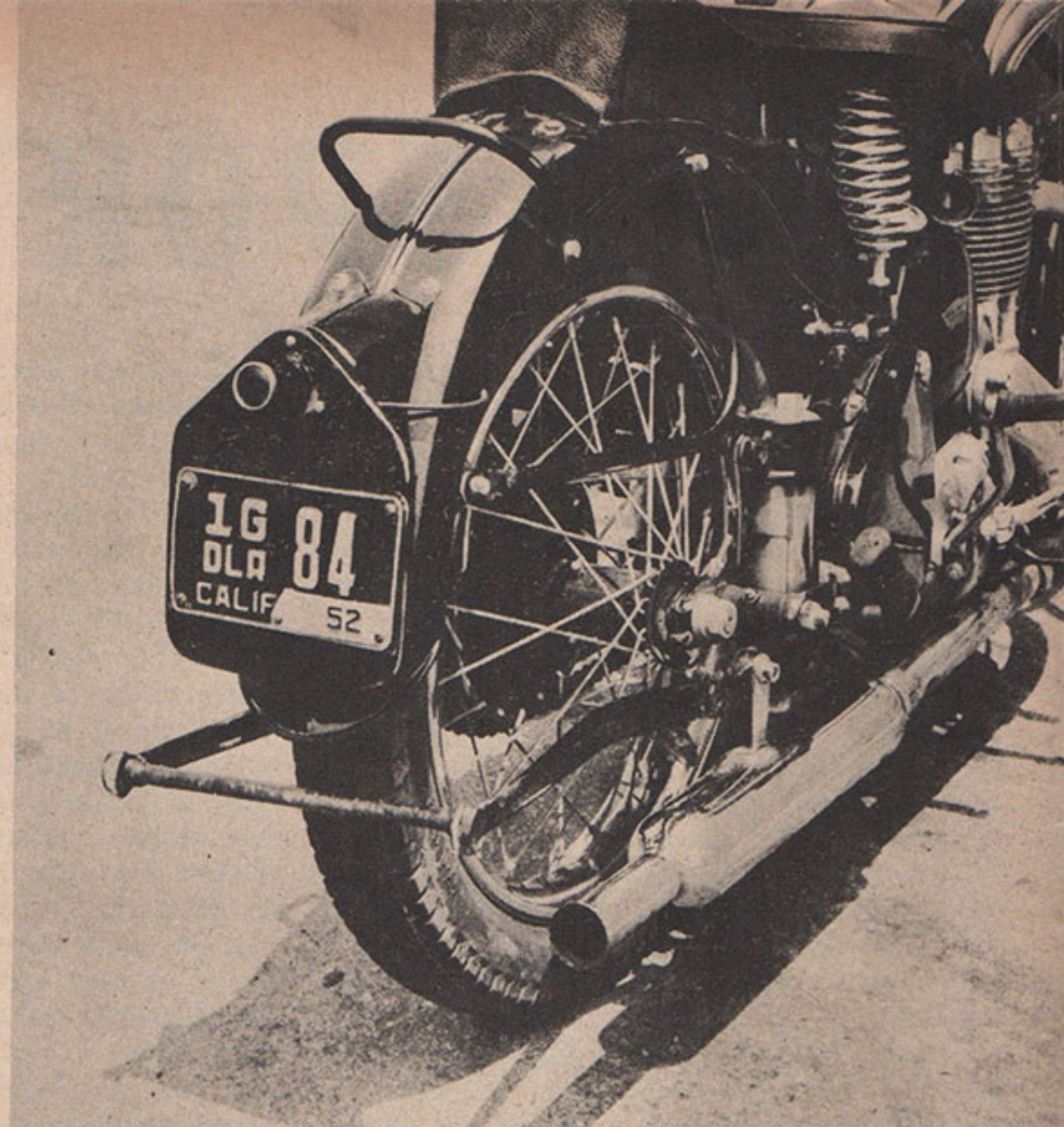


ABOVE, Aluminum alloy head, cylinder, base and primary case present clean appearance. Sidestand hung useless, a victim of wear after only a week of ordinary propping up. Lifting handle is useful for pulling bike onto rear stand

LEFT, Since the 3.25x19 rear tire was not the proper size nor tread for sand-wash riding, the Hunter took its quota of jolts under city atmosphere. Notice that while the steps were climbed as fast as possible both wheels are hugging in



Heaviest oil leak, beneath primary gear case, had blackened exhaust pipe before bike was placed in our hands, remained dry throughout remainder of test. Damp spot was immediately behind cylinder base, but upper portions of cylinder were especially clean. Kickstarter does not fold



Close-up of 3.25x19 tire that is felt to have lowered rear braking efficiency because of small size. Ariel's unique plunger suspension gave an entirely different feel than others of its type. This one seems to react slower, with a softer cushion. Note warped seat spring from hard bump

gives a heavy feel at speeds of around 5 to 10 mph but is unnoticeable at anything above that. Stability at speed was perfect.

Two very definite improvements have been incorporated in the new 1952 VHA (A for Alloy), Red Hunter: the alloy cylinder and the synchro-mesh transmission. With the new alloy barrel, cleanliness has been considerably improved since the push-rod tubes and oil lines are no longer exposed but incorporated within the cylinder wall. Even more important is the latest gearbox wherein all shifting is done by dogs rather than by gear. Moving parts are less in number and generally lighter in weight, thereby easier to shift. Shifting forks are now made of steel in place of bronze as before. Former Red Hunter gearboxes were lubricated by a light chassis lube but are now a conventional, sealed, oil lubricated box which makes for easier maintenance and less drag. Shifting was almost effortless on this model, there being only a moderate harshness upon entering second gear from low. All other gear changes were hardly audible and never missed, while the distance of travel of the shift lever was about normal. This represents the very latest in transmissions and was strictly a pleasure to operate. Another internal revamp

worthy of mention is the increased width of the cam and cam follower. The added area discourages wear, permits less attention, more time between adjustments.

Once on Red Hunter's back, I think you'll like the feel of things. Handlebars are proportioned about right for all circumstances, even in the dirt, although very little off-the-pavement riding was attempted after losing the muffler twice and fraying the tips of the footpegs. An attempt to raise the pegs for highway cornering revealed that they could only come up so far (not far enough), before hitting the base of the foot shift lever. The side stand seemed well enough out of the way, possibly because the lowness of the pegs prohibited it from scraping. The stand did, however, become completely useless after awhile when its stop gave way, allowing the bike to topple over twice. From appearances, the bike was sat upon heavily and at length while on the side stand, causing the prop to eventually give out.

A miscellaneous check of odds and ends should include a mention of the quality of both paint and chrome. They appear excellent, having a deep gloss. Fenders and frame are black, while the tank is a dark red stripped in gold. Of course there is one thing that is hard for an American to understand: no ignition lock or other

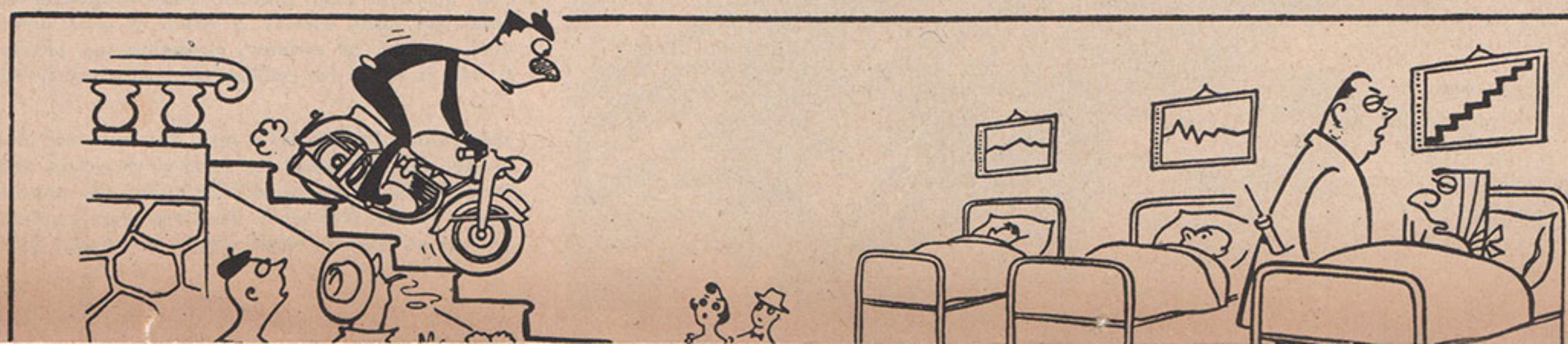
means of securing the machine is fitted. Although a built-in fork lock is probably the most fool-proof, outside of a lock and chain, an ignition lock discourages some of the less eager bike bandits. Although the headlight was good on either beam the "lapel button" taillight was inefficient and illegal.

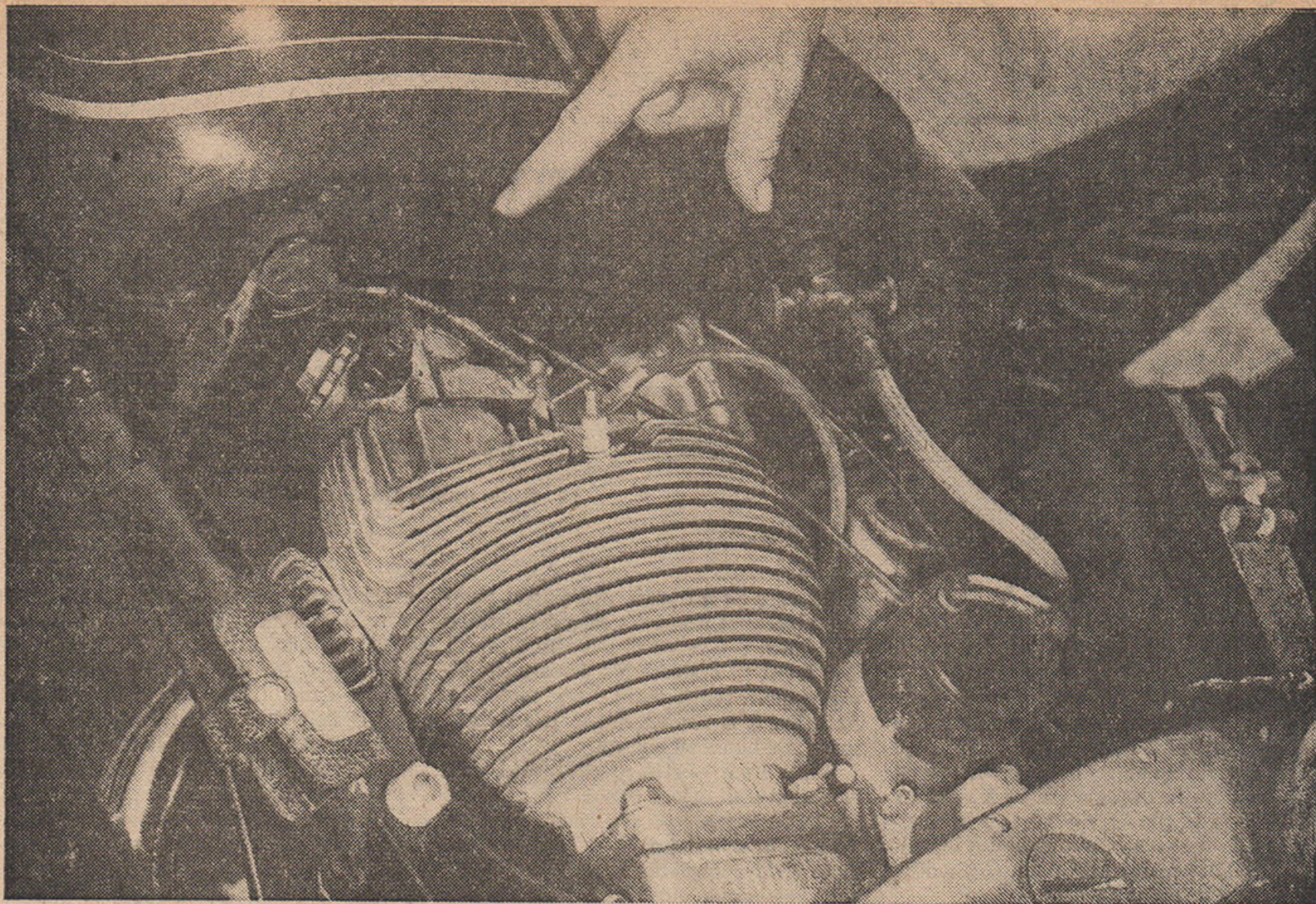
Before the time for parting came I noticed that the Hunter had stayed quite clean for all of the hurdles it had taken and sounded and felt just as robust as ever. Strangely enough, it actually seemed quieter than at first although no adjustments had been made. The price on this lively stallion is \$828.26, plus tax and license, at Pasadena, California. The same model in a rigid frame goes for \$762.34, plus. An interesting comparison between this machine and its counterpart with the iron cylinder can be made by checking back to CYCLE, July, 1950 issue, wherein officer Herman Filker gives his report. Performances were somewhat the same with the exception of top speed which is understandably higher on this later model alloy job.

The '52 issue of the Hunter will give you a good ride and a fast ride. It is easily adaptable for sport riding and should definitely rate a test of your own if you're in the market for a single.

BARON BALHOOFD

Courtesy "Motor" Magazine, Holland





This particular compression rock is in its seat when used to stop motor, allowing messy fuel and oil vapors to blow out onto cylinder head

PERFORMANCE SUMMARY

Speed		Braking		Slow Running	
Maximum in low	40 mph	From 25 to stopped, rear brake only	39'3"	High gear without snatch	16 mph
Maximum in second	68 mph	From 25 to stopped, front brake only	34'10"	Turning Circle	
Maximum in third	82.2 mph	From 25 to stopped, both brakes	23'6"	Minimum diameter	13'
Maximum in high	92.3 mph	Acceleration		Mileage	
(Speedo reading 100 mph)		1/10 mile drag (9.4 sec.)	38.3 mph avg.	Town	50 mpg
		1/4 mile drag (17.8 sec.)	50.5 mph avg.		

S P E C I F I C A T I O N S

ENGINE. Four-stroke single OHV 30.40 cu. in.; 3.22 in. bore X 3.74 in. stroke (497 cc, 81.8 mm bore X 95 mm stroke). Aluminum alloy cylinder and head. Cylinder incorporates built-in push-rod tubes and return oil passages. Only outside oil line is to rocker shafts which is now taken off return oil tank line. Valve inserts are stainless steel. Ground and polished inlet and exhaust ports. Large diameter mainshafts mounted on two heavy duty roller bearings and one ball bearing. Extra large double roller bearing big end with duraluminum cage. Aluminum alloy piston; 2 compression rings and 1 oil ring, 6.8 to 1 compression ratio. 24.6 maximum bhp at 6000 rpm. Forged steel flywheels, polished and individually balanced. Gear driven cam gear, chain driven mag-dyno. Cam ground piston. Dual valve springs. Increased width cam and follower.

LUBRICATION. Dry sump system with new heavy duty dual plunger, large capacity pump. Separate 3/4 gallon oil tank with novel removable filler screen in neck of tank.

CARBURETOR. Amal; no air cleaner fitted.

GEARBOX. 4 speed synchro-mesh Burman, foot controlled, up for low gear. Ratios: low, 12.6; second, 8.0; third, 6.0; high 4.7 to 1.

CLUTCH. Multi-plate dry type with cork inserts. Handlebar controlled.

IGNITION AND LIGHTING. 56 watt automatic voltage controlled Lucas magneto-generator. Generator can be removed for sport work. 7 1/2 in. diameter headlight will take standard American sealed beam unit. 1 in. diameter tail light. 6 volt new positive ground battery.

DRIVE. Front chain, 1/2 X 5/16 in. pitch. Rear, 5/8 X 3/8 pitch. Reynolds chain 23 tooth engine sprocket with engine shaft shock absorber. Front chain fully enclosed in aluminum oil bath case. Rear chain protected by 2 guards and automatically drip feed lubricated.

FRAME. Single tube cradle type of aero quality tubing. All joints brazed. Built-in lugs for side-car attachment. Plunger type rear springing with reinforcing stirrups.

FORKS. Telescopic, fully oil dampened. Maximum travel—6 1/4 in. Large bearing surfaces automatically lubricated. Steering dampener fitted.

WHEELS. Steel rims, chrome plated with red centers and gold striping. Size 3.00 X 20 front, 3.25 X 19 rear. Dunlop tires.

BRAKES. 7 in. diameter front and rear. High tensile iron drums. Exclusive, progressive action fulcrum adjustment insures even brake wear.

GAS TANK. All steel, 3 1/4 gal., rubber mounted. Double locking cap. Two level tap and filter. Rubber knee grips on sides.

FENDERS. Wide D section with tubular stays. Rear section hinged for easy wheel removal and fitted with lifting handle.

EXHAUST SYSTEM. Single port into chrome plated, low level pipe, muffler.

STANDS. Spring up rear wheel stand, spring loaded side stand.

HANDLEBARS. Adjustable American style chrome plated. Right bar; throttle, front brake lever, choke, horn. Left bar; clutch lever, spark retard, compression release, dimmer switch.

INSTRUMENTS. Illuminated Smiths 120 mph speedo with odometer and trip set. Ammeter and light switch set in headlight shell making for easy tank removal because of no wiring in tank.

SADDLE. Lycett; outside coil springs.

EQUIPMENT. Complete tool kit, tire pump, grease gun, electric horn.

FINISH. Red baked enamel tank with gold striping, black fenders, frame, etc.

GROUND CLEARANCE. 5 1/2 in.

WHEELBASE. 56 in.

OVERALL LENGTH. 85 in.

SADDLE HEIGHT. 29 in.

OVERALL WIDTH. 32 in.

WEIGHT. 364 lbs. dry.



The "FLYING DUTCHMAN'S" 24 Hour Record Has Never Been Challenged

By Jim Earp

Photos by S. E. Chubbuck

FRED HAM WAS NOT a particularly tall man, but he gave an impression of almost overwhelming massiveness. With his powerful shoulders bulging out against his leathers, he dwarfed the big 61 and 74 cubic inch Harley-Davidsons that he man-handled with such ease to establish incredible endurance records that, apparently, will stand forever.

In addition to enormous physical strength, Ham was possessed of a violent, driving energy and vitality that gave him no peace. He had to be moving. He had to be *doing* something. It seems that some savage force boiled within him at all times and could be released only through speed and distance—above all long, long miles on the road. He would come home from a shift as a motorcycle officer at West Covina, California, squeeze into his leathers and ride 400 miles to San Francisco just, as he would say, for the fun of it.

Another time, he put his wife on the crack Los Angeles-to-Chicago streamliner, The Chief, and waved goodbye as it pulled out of the station. Then he mounted his cycle, pointed it to the east, and rode. When The Chief pulled into Chicago, only 44 hours later, and Mrs. Ham stepped down onto the platform, Fred was waiting there to meet her. That, too, was just for fun.

His few close personal friends remember him almost with reverence. To them he was a genial personality whose inexhaustible vitality warmed an entire household. He was a man with plans, with several projects going at once and more coming up in the near future. He wanted to ride a Harley faster and farther than anyone before him, he wanted to accomplish things just for the sake of accomplishment, and he was attracted to people like himself—for example, Bill Graves, the master mechanic, and Fred Ludlow, one of the greatest track burners of all time.

Like any man with ideas and a positive, forceful personality, he had many friends,

a few very close friends, and a great number of enemies who took delight in baiting him. Now, twelve years after his death, it is difficult to evaluate his personality. So many little things have been forgotten. Actually, it is not necessary. His records speak for him well enough.

When Ham electrified the world with his sensational record run of 1,825.2 miles in 24 hours at Muroc, the comments were, "Well, I'll be switched!", or perhaps some more vivid exclamation, and then, "Who's he?" Few people outside of California had ever heard of him. It seemed that he popped out of the sands at Muroc, rode faster and farther than any single man and motorcycle have ever gone in 24 hours, and then disappeared.

Actually, Ham was known as an "iron man" throughout the west coast long before he made his more famous run, even though he had only been in the United States seven years at that time.

He was born in Naarden, Holland, June 22, 1908. But as a very young man he moved to South Africa. One mystifying facet of Ham's personality is revealed when one tries to find out exactly what happened during those early years. Nobody seems to know. The persistent opinion is that he came from a well-to-do Dutch family that held some property in Africa. Some of his friends say he worked on a dairy farm in Africa, some say it was an oil company, some call it a plantation on which Ham was an overseer, and others are equally positive that he was looking after his family's holdings in a diamond field.

The reason he came to the United States is not explained. Nothing is definite. Nor is it very important except as a revelation of another part of Ham's character. He did not talk much about the past. He was not, in all probability, secretive: as far as he was concerned, the past was dead. He was interested in what could be done in the present and the future.

When he arrived in the United States, he took a job as companion and chauffeur to an elderly couple, and immediately associated himself with the Pasadena Motor-

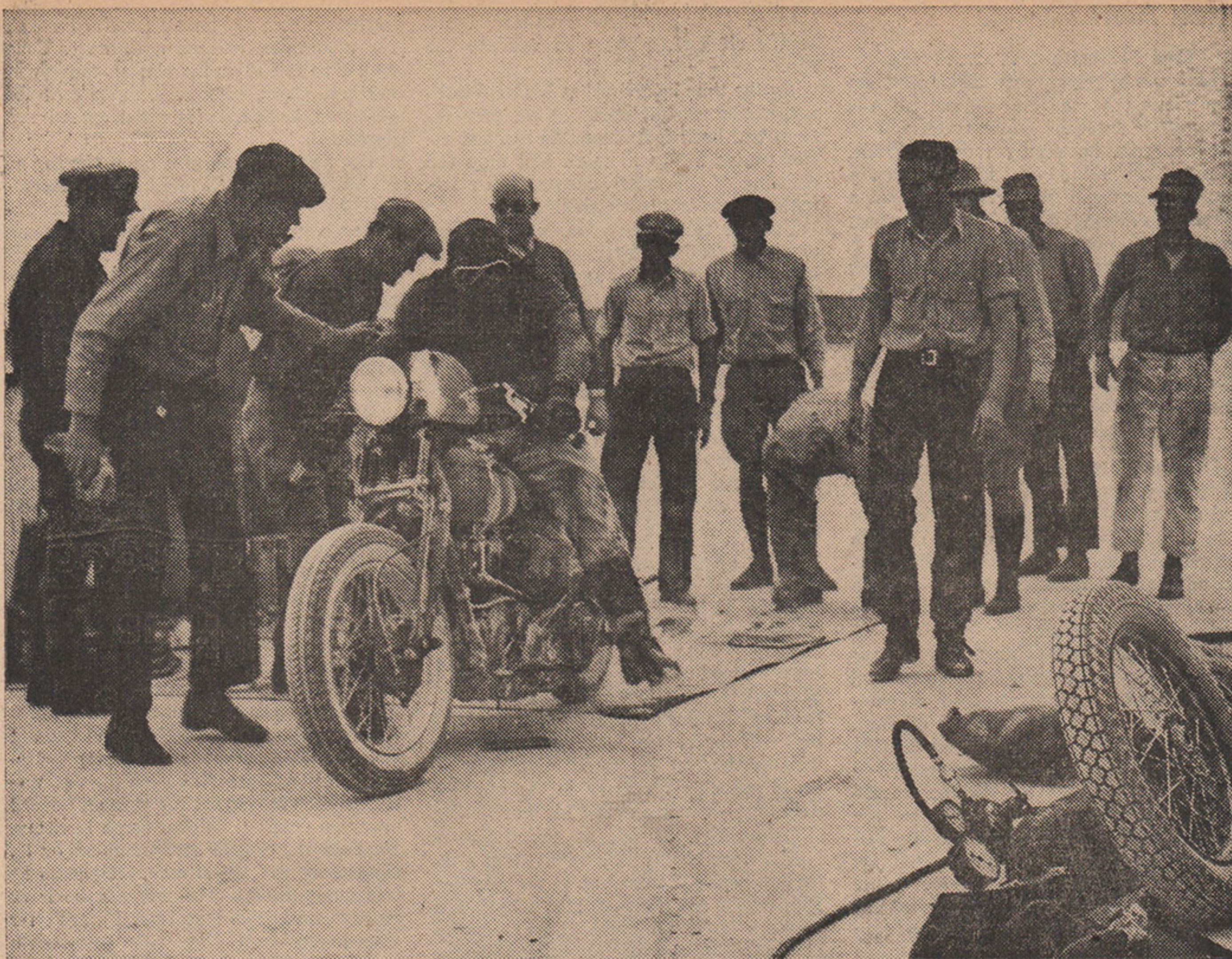
cycle Club—the nerve center of District 37 at that time. There he was in contact with such famous riders as Ed Kretz, Byrd McKinney, the brothers Cordy and Jack Milne, Lammy Lamoreaux, Ray Bowles, Sam Parriott, and many others of local and national fame. Even in that fast moving company, he gained a reputation for solid, rugged motorcycling.

His first activities were the club events and rallies that the P.M.C. sponsored constantly. He had a knack for surprising people. In November of 1932 the club organized a Scotchman's Derby—an economy run on a course through the city streets. Ham entered, riding a 74 cubic inch, flat-head Harley-Davidson. He weighed about 210 pounds at that time, so, considering the displacement of his cycle, no one considered him a serious contender. But the Harley had been carefully tuned by S. E. Chubbuck (still a Harley dealer in Pasadena) and by this time Ham was already a shrewd rider. When the big cycle finally choked to a stop, it had covered 168 miles on one gallon of gas. A 45 inch Indian Scout managed to squeeze out 174 miles for first place, but to this day people are wondering how that big Harley with such a heavy rider could go 168 miles. Chubbuck, by the way, is not talking.

He won the grueling Big Bear run in 1933, covering the rugged 133 miles in two hours and 58 minutes, and then entered again in 1934.

The Big Bear run was, especially in those days, notorious for mashing up motorcycles. Originally it started in down town Los Angeles, but as the sober citizens began frowning upon swarms of snorting two wheelers that unsettled their New Year's Day tranquillity, the run was moved away from the larger settlements. By 1933 and 1934 it was starting at Saugus. The course took off through the mountains and across the desert to end up in Pine Knot at Big Bear.

The run is rough enough under the best of circumstances, but in 1934 Southern California disgraced itself. The worst storm in 57 years dumped 12 inches of



Bill Graves, left, headed the voluntary crew that staffed Fred Ham's pit. The 24 hour record was almost undermined by repeated primary chain failure

rain on the shocked population of the Saugus area right on the day of the enduro. Slides blocked the highways, bridges were washed out, and trains and many automobiles were forced to hold over at Saugus until repairs could be made.

The Big Bear event is always started at midnight, December 31st. In 1934 as midnight approached, the weather caused considerable talk of calling off the run for the first time in twelve years, but most of the riders protested loudly. Stranded motorists and train passengers stared goggle-eyed at men who, once fortunate enough to reach Saugus, were foolish enough to consider leaving it while the storm still raged.

But such riders as Jimmy James, Earl Farrand, Lammy Lamoreaux, Fred Ham and a few others finally out-shouted the rest, and the meet got under way. Promptly at the stroke of midnight, while bells, horns and whistles announced the start of the new year, the first contestant, Lamoreaux, was waved on his way. One by one the riders disappeared into the savage storm as the clock ticked off the minute intervals.

Then the fans started home from Saugus. An unidentified clipping from a paper of that period tells the story of that night. The sound, colorful reporting seems to indicate that the writer was Chet Billings,

then editor of *The Motorcyclist* . . .

Then (for the fans) began the long trek back to town. For the fans the rest of that night and most of the next day was a dragging nightmare. It took until 6:30 the next morning for the cars and trailers to travel the 40 miles back into Los Angeles. About 3 A.M. came the cloudburst which wiped roads, homes and lives into oblivion. For the most part the cars became separated. Late the next day as phone service was slowly restored the checking began. It was found there were no casualties among the fans, but, there was no word from the riders. By then cars could not get through to the desert . . .

. . . Those who remained behind looked rather than spoke their doubts. Out there ahead of the riders were dark canyons and a black desert. Everyone visualized washout-out roads, boulders and swollen streams. Not a few probably visualized a dashing figure which headed through water for a bridge that wasn't there. They could almost see the rider and mount turn over and over in a losing fight with the churning current . . .

At 10 o'clock New Year's night Earl Farrand calmly rode back into

Glendale. Later it was found that Fred Ham, the winner, got back at eight in the morning and went to work . . . The news spread over the grapevine system of motorcycle row that all the riders had made it safely.

Needless to say there was enacted on that run some spectacular riding. In the presence of unseen Joshua trees, and other weird desert growths six riders put on what was probably the crowning show of the year—fearful broadsides, long slithering leaps and great water splashes. But they made it . . .

It seems that the record of that historic run should be mentioned again. Especially in view of the fact that Fred Ham won over such rugged competition. He had a bit of luck when Lammy Lamoreaux, who was running within one point of a winning score, abandoned the race when his motor blew up at the Box S ranch—almost at the finish. But in these events, victory belongs rightfully to the man who prepares his machine carefully and *does* finish. The results of the event are as follows:

Fred Ham986
Earl Farrand970
Winnie Maas905
Jimmie James808

(Continued on next page)

Fred Sherholtz794

So it can be readily seen that Fred Ham was coming along. He entered all the toughest enduros he could reach and in between runs he simply rode and rode. During this period, too, he developed a lasting friendship with Bill Graves, a Harley-Davidson dealer in Pasadena. Ham was not, strictly speaking, a mechanic, although he enjoyed working with motors and knew them well enough to conserve them in a long run. It was to Bill Graves—the Tom Sifton of that period—that he gave all credit for the mechanical perfection of the motors that brought him the big records.

III

It was with the help of Bill Graves that he began preparations for his first big record attempt—the colorful, historic Three Flag Run. This long distance run starts in Blaine, Washington, at the Canadian border and then sweeps straight down through Washington, Oregon, and California to end at Tijuana, Mexico.

The first recorded attempt was in 1915 when "Cannonball" Baker bumped and slithered down the unpaved roads to complete the run in 81 hours and 15 minutes. Roy Artley, Hap Scherer, and Walter Hadfield all took a shot at the record in later years. In 1920 Wells Bennett created a sensation by fighting his way over the still primitive roads to grind out the distance in 51 hours and four minutes. By 1926 Paul Remaley had ridden one of the 21 inch, overhead valve Harley-Davidsons from border to border in 38 hours and 47 minutes.

It is unfortunate that these runs over normal roads have been outlawed in this country. The traditions and stories of the old Three Flag Run, as riders fought their way through the wild storms of the north, miserable roads, cows, sheep, and the blistering heat of the southern valley regions, are interesting and colorful. Actually, such runs were illegal in 1936 when Ham rode for his record, and, consequently, the event has not been greatly publicized.

The entire event was planned, and preparations were made with the methodical care and patience that characterized all the work done by Bill Graves and Ham. The cycle was to be Ham's own—a 74 inch, flat-head, 1935 V.L. Harley-Davidson. Before the event Graves tore the motor down and checked every part of it. The heads and ports were relieved, everything was polished, and it was "generally made sanitary."

Then in August 1936, Ham left his home in Pasadena and started north. He took his time, memorizing the tough spots along the way and checking for the fastest, safest route that was available. Sometimes he would ride back and forth over a particularly treacherous, winding stretch of road until he was satisfied that he could master it at speed.

All along the route he stopped and made arrangements with reliable men who were to have fuel ready for him as he came

through. Generally those same men signed Ham's credentials sheet to validate the run.

By the time he arrived at Blaine, Washington, the starting point, all the preparations had been completed. He had the entire course firmly in mind and only the question of the most advantageous starting time was left to consider.

For one thing, the winding, unfamiliar mountain roads of Washington, frequently littered by rock slides and constantly under repair, had to be taken during daylight hours. They would be far too dangerous at night—especially at speeds over fifty miles per hour. Then, due to the cold of the northern mountain country, Ham had to wear leather clothing. The valley country through all of inland California simply fries during August and September, so, to avoid the delay necessary to change to cooler clothing, he wanted to cover as much of California as possible in the cool of the night.

He finally settled on 3:00 A.M. in the morning as the best compromise.

Then, just as he reached his decision, the dry weather broke with heavy rains. Ham rested, slept as much as he could, haunted the weather bureau, and almost damaged his neck watching the sky for a break in the clouds. On August 30th the weather bureau informed him that he could probably get away in the morning with another storm riding his rear fender.

Cooperative officials at the Canadian border signed his qualifications sheet a little in advance. Looking up at the weather, Ham could see the next storm beginning to stack up in the north; then promptly at 3:00 A.M. the officials flagged him on his way. He was moving into the mountains before dawn, and he nursed his motor and drifted along until the light got better.

As the roads became visible he increased his pace along the drops, climbs and turns of the mountains until he was holding at 55 mph most of the time. Only on rare occasions did he drop below 45. By 6:30 A.M. he was in Tacoma ahead of the morning rush to the offices, and by the time he arrived in Portland the rush was over. All this, too, had been planned.

After he cleared Portland, the roads were better—less mountainous with very few large towns. He stepped up the pace and relaxed a bit then, and nearly demolished a bus that had caused a traffic jam on a blind turn. Nerve, quick reflexes and a cool head saved him, and he never allowed himself to relax again. He ground on steadily through Washington. His credential sheet was signed at Harrisburg and Roseburg, Oregon. Once through Oregon, he could breathe a little more easily. The Oregon police are known to grow long fangs and slaver ferociously at the very thought of cycle riders who attempt endurance records over Oregon roads.

At about 3:00 P.M. he crossed the border into California at Hornbrook, but by that time he was riding under a handicap. Throughout the southern part of Oregon the heat had continued to mount until his

leathers, which had been a blessing through the mountains, became a torment. Then he had to ride down the plateau country of northern California where, in spite of the elevation, temperatures often exceed 100 degrees.

But he ground on, singing at the top of his voice to keep his mind off his discomfort. As he dropped into the oven-like Sacramento valley hordes of insects became an additional plague. Running through black swarms of bugs at high speeds is roughly like hitting a charge of bird shot. At least they gave him something to occupy his mind, for he was busy for hours wiping demolished insects off his spare pair of goggles while he rode.

When he arrived at his check point in Sacramento, early in the evening, he was so far ahead of the proposed schedule that the startled checker began to call ahead to alert other refueling points. It is well that they did. When they finally contacted the checker in Fresno, he was still in bed with his alarm clock set to awaken him several hours later. In response to the frantic calls from up north, this worthy dealer, still half asleep, bounded on his motorcycle in his pajamas and roared out into the streets. He just did manage to catch Ham as he streaked through town.

That was the last checker who got out in time. The rest were still sleeping peacefully as Ham, exceeding even the optimistic schedule he had set for himself, opened up as he entered his own home territory. He held the needle at around 80 or 85 throughout the last stretch, feeling, as he told Chet Billings, "that it was do it or bust. If bust it did, at least I wasn't far from home."

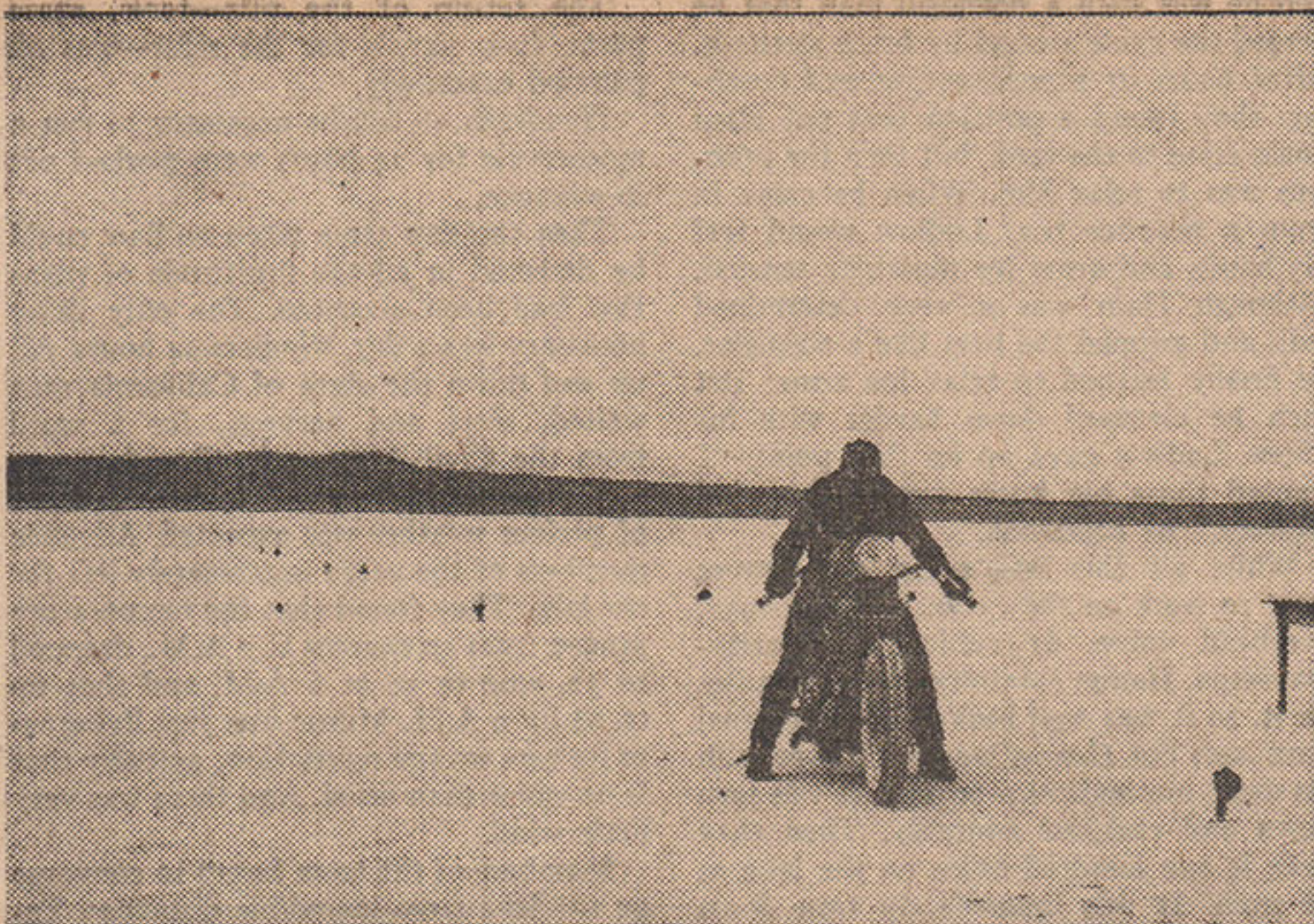
He picked up one special signature from a traffic officer in Anaheim who first showed a professional interest in the streaking cycle and then, when the case was explained, grinned and waved him on with a blessing.

Down in Rose Canyon, near the border, Roy Artley, another old time Three Flag runner, was waiting on the route to escort Ham along the last few miles and give what assistance he could at the border. He had been contacted at his San Diego home by the confused checkers from the northern part of the state who sputtered something about Ham being ahead of schedule; so Artley was waiting in a roadside cafe drinking coffee and twitching nervously, with no idea when Fred would be by.

Then there was a roar and a leather clad rider had come and gone. Leaving a fine spray of coffee in the air behind him, Artley tore his way out the door and mounted his own cycle like a Hollywood cowboy. By holding his needle up to the 100 mark, he managed to pull up beside the grimy, tired rider.

Ham looked over and grinned; they lowered their heads and bored on south. At 7:07 A.M. the border officials signed the credentials sheet and the new record was officially established at 28 hours and 7 minutes.

Every other record had been completely shattered. Ham had blazed his way over



Finally the seemingly endless preparation was over. The cycle was as ready as it could be and Fred Ham was about to realize his dream of going farther in 24 hours than any other cyclist before

1,478 miles of twisting highway, through cold and bugs and heat, to chop over ten hours off the fastest time ever made before. A record that will probably stand forever as a tribute to his detailed planning, skill, and that enormous strength and energy for which he is now so famous.

IV

There can be little doubt that this brutally fatiguing record run of 28 straight hours gave Ham the confidence that led him to try for the 24 hour record. It taught him many things that he later took into consideration in preparation for his most famous record.

Above all, it enforced his opinions on physical conditioning. Before any major event Ham trained as carefully as a prize fighter. He watched his diet, he got as much sleep as he could in view of his varied activities, and he conditioned himself by swimming incredible distances daily.

In fact, Ham's entire personal life is a credit to the sport of motorcycling. If one disregards the appalling demands he made on his resources of physical energy, he led a life characterized by commendable moderation. He never drank beyond an occasional glass of beer and only enjoyed a pipe at rare intervals.

He devoted time lavishly to many worthwhile organizations. Besides his own riding, he helped organize the activities of the Pasadena Motorcycle Club, was a commissioner of the A.M.A. for district 37, and was connected with the Boy Scouts throughout his entire life—both as a youthful member in Holland, and as a scoutmaster of several troops during his adult years. His own 30 foot sloop, which he kept at Balboa, was the training ground for his troops of Sea Scouts.

In fact, as Mrs. Ham remembers, three Sea Scouts accompanied them on their honeymoon.

We must also bear in mind that in all of Fred Ham's motorcycling activities he

was very strictly amateur. He owned the machines he rode and refused any major aid from the Harley-Davidson factory. It is perhaps for this reason that men like Bill Graves, Chubbuck, Fred Kraus, and Fred Ludlow were willing to donate so much of their time to aid him in making his runs.

It must also be remembered that Fred Ham was never a track racer. He was an endurance rider. He respected the big Harley-Davidsons that could hurl his bulky frame along at 100 mph speeds, and he dedicated years of effort to proving their worth. He was, for one thing, too big and heavy to compete consistently on tracks even if that aspect of the sport had appealed to him.

When in his later years he took a job as motorcycle police officer at West Covina, California, rousing feuds occasionally broke out between himself and several track racers. Some of the stories surrounding those two-wheeled scuffles have been the grounds for hilarity throughout Southern California for almost fifteen years.

Ed Kretz somewhat ruefully tells one on himself that is too good to miss. At about the time that Kretz was beginning to blow most competition off the national tracks, Ham was quite justifiably proud of his motorcycle. He had bored out an overhead valve, 61 cubic inch Harley-Davidson to 74 inches and souped it with hot equipment including Winfield cams. It was fast for a cycle with fenders, lights, a siren, and all the trimmings including a 210 pound rider.

One time in the course of some normal boasting between Kretz and Ham over the merits of their respective motors, Kretz came up with a proposition. He pointed out kindly that Ham, being a traffic officer, couldn't stage a race through the streets. Not legal, you know. However, Kretz had to pass through West Covina every night on his way home from work, and if he were to go a little too fast, then the race

would be on. They could compare their cycles; and, of course, Ham would *never* be able to identify the fleeing cyclist.

It is hard to tell what Ham was thinking about, but he agreed. Perhaps he thought Kretz was joking and that nothing would come of the conversation. Or perhaps Kretz misunderstood.

A few days later, in any case, Kretz and Von Dickerson passed Ham on the road and, promptly, unwound.

Ham just as promptly took off after them and the chase was on. Kretz was riding a very hot stripped Indian and Von Dickerson was almost as fast. When Dickerson ran out of horsepower on a hill, he would drop into Kretz's pace and be towed along.

No one could expect Ham to catch Kretz. There were very few of the hottest track racers in the nation that *could*. Kretz and Dickerson reached home with Ham still pretty much out of sight—but they could hear him coming *and his siren was still going*. Then the horrible thought struck them that maybe it hadn't been Ham. In the excitement when he came into view they convinced themselves that it did not look like him at all.

Actually, it *was* Ham, but they did not recognize him, so off they went again through the yard and into the back alley. As they roared down the alley they almost ran over one of their neighbors. While the startled man was still spinning in their wake, Ham came through and scared him all over again. Unfortunately, the neighbor was a state highway patrolman, and he too joined the chase.

Kretz and Dickerson got away again and, feeling their own homes to be somewhat insecure, stayed at Jim Kelley's house that night. But next morning Ham looked up Kretz at work to tell him that a warrant had been sworn out for his arrest and that he should report to the police station.

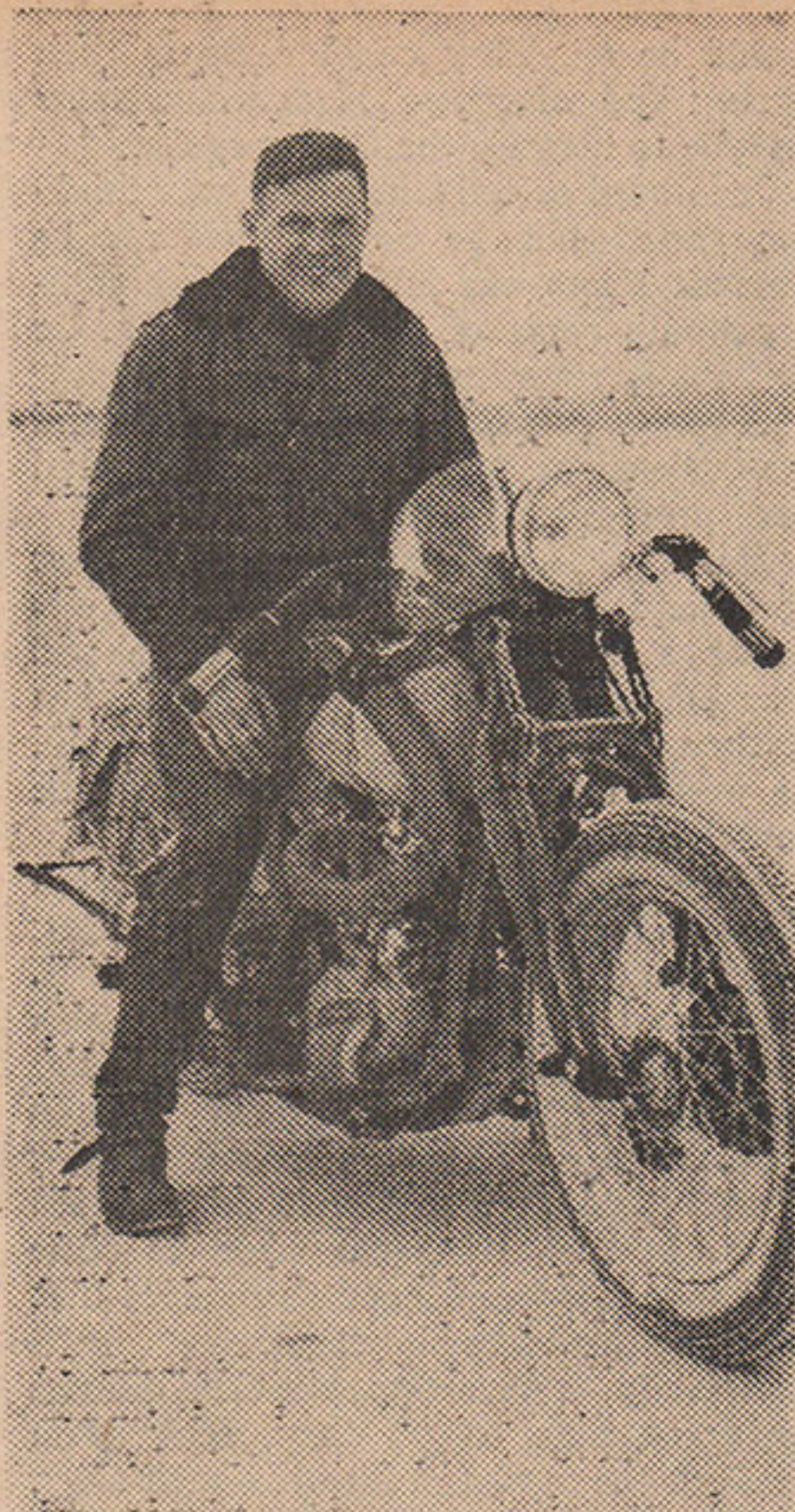
Kretz now admits that Ham could have done little else with a state policeman who could identify the culprits staring over his shoulder; but at the time, he reported to the police station feeling decidedly put upon. He was immediately clapped in jail and spent the night there. It cost him fifty dollars to get out.

Kretz bears little resentment about all this. It was a comedy of errors, misunderstandings and unfortunate circumstances. However, he says irately, "Dash-dashblankblank! 25 dollars would have been enough!"

The startling thing was the speed the big man *could* accomplish. He was absolutely fearless, and if a speeder went by he would chase him regardless of his name. A few of the very fast track racers—like Kretz and Ray Bowles—managed to get away. But Ham also embarrassed a respectable number of hot riders by running them down—beating them at their own game.

From all reports he did his job as a police officer like he did everything else: thoroughly, conscientiously, and well.

(Continued on next page)



Fred had rare physical stamina, and the motorcycle on which to pin his hopes. Flexible air cleaner was grease-lined, out of sand's way

"IRON MAN" continued

V

Almost immediately after his spectacular Three Flag Run, Ham began his methodical preparations for the 24 hour run that was to crown all his achievements.

The recognized AMA record that Ham was shooting at was established in 1922 when Wells Bennett roared 1,562.54 miles over a Tacoma speedway to prove for the first time that a man and a motorcycle could endure 24 straight hours at high speeds. In addition, Bennett set intermediate records for fifty miles and for every successive hundred miles up to 1,500. Then during an Indian speed test in 1935, Bo Lisman raised the records for 100, 200, 300 and 400 miles.

Ham went into vigorous training. He began swimming every night at the local YMCA until, just before the run, he was swimming five miles daily. He actually pared his weight down to a little over 180 pounds.

For coaching on such an important event, he turned to the old master of speed, Fred Ludlow. He could hardly have picked a better coach, for Ludlow was able to draw on experience dating from 1911 when he entered his first race and extending up to the time of the run. He had competed with Don Johns during the infancy of motorcycle racing and his records appear all through the AMA official record book to this day.

Ludlow says that he had to teach Ham to get down out of the wind comfortably. Ham had learned to ride sitting erect;

and he was such a powerful man that he horsed the cycle around by brute strength. After hours of experimenting and coaching, they found a position that put Ham down close to the tank, but then the problem was to relax him. When he came in from a practice run, Ludlow would feel his hands and arms for muscular tension. Although Ham was a very determined man and gripped the bars like a strangler, he finally learned to relax his arms; but then he clamped down harder with his knees. Ludlow gave up on that point. "I wanted those big knees out of the wind anyway," he explained.

While all this was going on, Graves went to work on the cycle. It was a 1937, overhead valve, 61 cubic inch Harley-Davidson. Hamm carefully put 3,000 miles on it, so it was well broken in for normal purposes; but Graves worked it over with his usual methodical precision. It was torn down and checked minutely. Then they gave it one hundred miles on the lake at 90 mph. It was immediately torn down and examined for heat friction spots. Every suspicious part was replaced. Then back to the lakes for another run and the entire process was repeated. Everything was checked and double checked until Graves was satisfied that nothing more could be done.

The plan was to keep the cycle absolutely stock, so, although every part was polished to perfection, and maximum tolerances were set in on final assembly, no major alterations were made. The stock 6½:1 compression ratio and the 3.73:1 gear ratio in high remained unchanged. The front fender was removed. A straight pipe was added in place of the stock muffler. And to protect the motor from the fine, emery-like dust that makes up the lake bed, the air cleaner was replaced by a special flexible tubing that reached up above the front wheel. Everything else was stock. The head light and tail light were both working at the end of the run. Even the rear stand was left on.

As preparations were completed, the course was laid out. Someone had surveyed a five mile circuit previously and had embedded small pieces of tin every 97 feet around the pole. These markers were laboriously uncovered where the sand had been washed over them by the winter rains. They then drove holes at each one and set in wooden stakes all around the course. But on an experimental run, Ham found that he tended to drift in between the stakes, so more holes were pounded into the hard sand and the stakes finally stood at 48½ foot intervals. The Gilmore Oil Company, which provided all the fuel, also furnished hundreds of flares to light the course at night.

The planning and preparations extended over months. Check sheets were prepared. Officials were contacted and briefed on all the plans.

Provisions were made to feed the people who would attend the long run. Tents were located and stored in readiness to provide shelter for those persons who might want a few hours' rest during the run.

The set-up of the pits—tools, spare parts, fuel, signals for the rider—was all planned exactly.

Hundreds of details necessary to run a motorcycle for 24 hours were worked out in advance.

Then the day came when no flaw could be detected in all the multitude of plans that had been accepted. The only thing necessary was a dry, windless 24 hours. All up and down the state of California men waited, alert and nervous, for a word from the Civil Aeronautics Board.

Then in April the word came—24 hours of perfect weather was expected. Advance members of the party immediately left for the lake. They found that the temperature ranged from 40 degrees at 2 A.M., dropped to 32, rose to 38 at 6 A.M. and shot up to 98 by 9 A.M. Muroc was just living up to its own savage reputation: actually that is no worse than usual. And there was very little wind.

Members of the team began to converge on the lake from incredible distances. Toward eleven o'clock, as a few clouds drifted overhead and the temperature dropped to 85 degrees, the camp had already been set up by the well drilled crew.

Ham got off shift at eight o'clock in the morning, rode the cycle from Pasadena to Lancaster (about 80 miles over the old road) to blow the bugs out of it, and then loaded it on a truck for the balance of the trip to Muroc.

An enormous amount of work still had to be done before the run could get under way. While Graves made last minute adjustments on the cycle, for example, Fred Kraus (an AMA official who also had done some of the work on Ham's cycle) and Elmer Oden were out on the course tying orange colored paper bags to the top of each marking stake for more positive visibility.

At one o'clock Ludlow rode two laps at 95 miles per hour to double check Graves' tuning and completely disorganized Fred Kraus and Elmer Oden in the process. They were placing the last of the orange bags when they heard the roar of the motor. Kraus explains that as the cycle appeared out of the shimmering heat waves they could not see any rider. Both men sprinted to a safe spot inside the track as the cycle streaked toward them. They were firmly convinced that it was running wild. Only as the cycle went by did they get a glimpse of Fred Ludlow. Kraus says, "He was so tightly wrapped down around that motor you could hardly tell him from paint. That Ludlow could disappear completely behind a speedometer."

At one o'clock Ham went out for three fast laps to check clothing, saddle position, bars, and to watch for any other little detail that might prove tiring during the long grind.

When he came in he drank a glass of milk while watches were checked and the timers got into position. The AMA referee gave the word at 2:20 and Graves and Ham took the cycle one mile down the track. At Koogler's signal the flags were dropped and a white cloud of dust began

accelerating toward them. At exactly 2:35 P.M. Ham flashed past the starting line and the long, long grind was under way.

Ham had already been without sleep for 24 hours when he started. He hoped to be able to ride straight through the entire run, but in case of illness or just exhaustion Fred Ludlow and Roy Artle were standing by as relief riders. The machine was to get the record even if Ham did not.

They had already calculated the lap speeds that would be necessary throughout the entire run if Ham was to make a clean sweep of all the intermediate records. Since records had been made and broken repeatedly for the lower distances, it was necessary that a high average speed be maintained during the early part of the race. In one way this was an advantage, since the rider would be working hardest while he was still fresh. Of course, there was a risk of overloading the motor so badly that it would burn out sooner.

The pit crew was ready with signs to vary the rider's speed. A black plus sign on an orange background meant "faster." A minus sign meant "slow down." "O.K." meant "hold it steady." The crew later complained that the sign they used most was "slow down."

The first ten laps had to be taken at an average of 90 mph to better the standing 50 mile record. At first the speeds varied considerably as Ham learned to gage the sound and feel of the motor—92 mph—90—92.3—93.5—94. But gradually he began to settle down, and at the end of 10 laps, or 50 miles, the average speed was 91.37 mph. And that was the first record.

They slowed him down a little then, but not very much. They still had a fast hour record and a 100 mile record ahead of them. And since the tank only held $3\frac{3}{4}$ gallons of gas, a pit stop was necessary every 95 miles. It is very fortunate that they did keep up speed, because when Ham came in for the first pit stop after an hour of running at over 90 mph, he entered the pit area at forty mph. He said later that he thought he was going slow enough to step off. He managed to swerve and avoid one still camera, but he tore a tool box to pieces and sent a moving picture camera looping through the air to take some amazingly varied pictures of sky, sand, wheels and feet. Runners were immediately sent out to move the cutoff point farther down the course. The rest of the stops were without incident.

When the first stop was made, though, they discovered that the stock, rigid oil lines had split. Even during the confusion of that wild stop, they still thought fast. At 91½ miles the hour record had been broken, and they only had to go five more miles for the 100 mile record; so, they fueled the cycle, filled the oil tank again and sent him out for another lap. The entire stop cost them five minutes, but when Ham came in after that one five mile lap, they found that he had averaged 84.045 mph—another record.

They replaced the rigid oil lines with flexible lines and sent him out again. For a time everything went smoothly. Ham

roared steadily around the course, stopping every 95 miles for gas and clipping off another record every time another hour passed or a hundred mile mark rolled around. Then, at about 400 miles, more trouble became noticeable.

The primary chain began heating and, as it loosened, began a wild, sickening clatter against the chain guard. This represented the only serious error in judgment made by the methodical planners of the event. They had somehow talked themselves into trying a new, experimental primary chain. The chain might have functioned perfectly had it been properly broken in, but it was new and matters went from bad to worse.

They adjusted the chain and watched Ham shove off. Ten more minutes had been lost and every man who had seen that chain knew that trouble was on its way again, that it would only be a matter of time before the clatter against the guard began again.

At about this time Ham kicked to get started after a pit stop and wound his starter up. The starter bearing froze solid. From then on they had to push him off in high after each stop. But that was a minor matter right then.

Gradually the light faded and the desert began to cool. The nervous, deceptive shimmer of the heat waves gradually faded away and the anxious pit crew, for the first time, could follow the course of the rider completely around the long circuit. Every ear listened for a sound from that chain.

When it came there were some who began to lose hope of a successful run. The luck seemed to be all bad. Another ten minutes burned away as deft hands again moved the transmission back to take up slack. They pushed him off once more as a crew moved down the track lighting the flares with a blow torch.

Ham's bulky figure dwindled as he picked up speed, and the desert sunset put on its own wild, defiant show. The great red sun hung over the horizon garishly painting in the sky around high thin black clouds. The lake bed, the camp, the faces of the crew were caught in this bloody light as they traced the path of the dwarfed figure around the curving track. Each time Ham roared by they listened.

Three times they had to pull him into the pits to make adjustments. Faces grew bleak and strained. The oiler was wide open, and at every pit stop a great shot of oil through the inspection hole bathed the chain, but it still ran dry.

At about 800 miles the cycle choked into the pits. Fighting the now nearly solid chain had heated the motor to such a degree that it was pre-igniting. Harley-Davidson did not furnish any hot racing plugs at that time, and the stock plugs were nearly melted away. The general opinion was that after all this time and effort, after over thirty men had assembled from distances up to 1000 miles, the run was over.

But the pit crew refused to give up. They set to work to replace the burned

out chains with the original, Duckworth chains that had been well broken in by over 3000 miles of road travel. Some of the labor involved must be mentioned before we can realize the brilliant job that was done that night. They had to remove the left foot board, the outer chain guard, the clutch rod, the engine sprocket, and finally the old chain. That chain had burned to a point where the links could hardly be moved with a hammer. Heat had discolored the sprocket and the sprocket shaft clear into the fly wheel. Then they loosened the rear wheel, loosened four nuts and a bolt on the bottom of the transmission and moved it forward with the adjusting screw. The clock was running all this time. Men cursed quietly and perspired in spite of the chilling winds that rose as night came on.

Then they arrived at the half way point as they rolled the primary chain on. They replaced the rear chain for good measure. The transmission was moved as needed to adjust the chain, they readjusted the rear wheel, the brake, the shift rod and the clutch rod. Sneaking an occasional look at the clock, they replaced the foot board and the chain guard.

The burned out plugs were replaced by R4 Lodge racing plugs. The pre-ignition of a hot motor would only clean them.

The still tense pit crew checked the time as they wiped their hands. It was somehow shocking to learn that during that apparently endless labor, only half an hour had passed. When Ham came by the pits after that first lap, the motor was roaring at full power. Bill Graves and the rest of the crew grinned: the motor had survived the brutal overheating.

A steaming pot of coffee and a huge pot of beans simmered over the fire as the night wore on. The twenty-two checkers worked in shifts through the night, and some could stumble into the tent for a few hours' sleep. But Ham kept at his solitary grind all through the night. At 2 A.M. he had covered 935 miles. A little over 45 minutes later he passed the 1000 mile mark. Then they began to slow him down. The fast records had already been broken, and the main worry now was to finish the 24 hours.

Throughout the night as Ham swept into the pits covered with the fine dust of 1000 miles and more, he seemed to be more fresh than many of the crew. He would drink a glass of milk, eat an occasional piece of chocolate or a few small cut squares of steak, and be off again.

The scene was wild and unearthly. The five mile ring of yellow, flickering torches was like a crown in the immense black vault of the desert and the sky. Glowing red flares marked the spot where guards watched a road that crossed the course. An avenue of flares lighted the approach to the pits and the crew worked in the harsh white glare of gasoline lanterns. As the rider roared by, light grey ghosts of dust flowed along the desert floor through the light of the torches. The cycle headlight flashed its beam powerfully at the

(Continued on next page)

pits, moved away dimming the weaker flares, and finally, at the far end of the circle became just one of the many points of light—but it was always moving.

All hands were feeling the strain of fatigue. Checking became an agony as the temperature dropped down near freezing, the pit crew fidgeted among the neatly arranged tools, parts and fuel cans. Out on the course Lester Hall and Elmer Oden laboriously shoveled loose sand off the track where the steadily pounding cycle had broken through the hard surface crust. They worked for fourteen hours along a 1½ mile stretch of the course.

In the dead grey dawn, when vitality ebbs to its lowest, even Ham was showing signs of strain. But Fred Ludlow was always there during the pit stops rubbing circulation back into his hands and arms, encouraging, pointing out methods to conserve the motor, and insisting on occasional changes in position for greater comfort and more effortless speed. Bill Graves nursed the motor with grim efficiency.

As the day advanced the temperature rose with the savage speed of desert country. Soon the heat waves were once again distorting the view of the course. Sometimes Ham seemed to be riding 100 feet above the ground, and sometimes, mysteriously, he seemed to vanish. At about 10:30 a stiff wind came up, and the weary rider had to make a special effort to flatten out on the tank.

Then at 11:11 there was a huddle at the checking table. A sign was lettered: 1,565—NEW RECORD. As Ludlow flashed the sign to the tired rider, the watchers seemed to sense his feeling of increased determination.

From then on, it was *all* new record. At the 360th lap a new sign was lettered for the 1800 mile mark, and Ham had achieved the goal he set for himself. He had then been riding for 23 hours, 40 minutes, and 31 seconds.

Five laps later Fred Ludlow exuberantly waved the checkered flag and the most incredible run in motorcycling history was over. In 24 hours Fred Ham had covered 1,825.2 miles for an average of 73.786 mph. If the 2 hours, 6 minutes and 50 seconds spent in the pits is deducted,

his actual average speed was 83.52 mph. Every American hour record was broken from one to 24 inclusive: and new records were established for fifty miles and every hundred mile mark up to 1,800. A complete sweep.

Even the FIM world record for the 24 hour run was broken. It had been established at 1770 miles on October 5-6, 1934 by Narcy, Verchere, M. Pahin and R. Pahin—at Montlhery, France. They made the run on a Peugeot at an average speed of 73.786 mph, *but they rode in relays.*

After Ham coasted into the pits and the jubilant hand shaking was over, camp was broken with Arab-like speed. Within an hour Muroc was once again a desolate, wind swept lake bed. All that remained was a groove a few feet wide and several feet deep running through the solitude in a great five mile sweep.

Ham had then been without sleep for over 48 hours and, as could be expected, he felt a profound need of relaxation. He drove his car home to Pasadena, showered, changed clothes, and went out to a show.

The motor (which had been examined by the AMA officials and certified as stock) was torn down and left in the shop of Graves and Chubbuck for over a week. Anyone was welcome to examine it. Nearly everybody in the area who had ever ridden a motorcycle did. Then it was shipped to the Harley-Davidson factory, and a new motor was presented to Fred Ham.

VI

It must always be remembered that this run, like the Three Flag run, was totally amateur. Ham had again refused to ask for factory backing. All the men who participated in the event *donated* their time just because of their respect and liking for Ham, and through their love of the motorcycle game.

But no one who knew Fred Ham could expect him to be satisfied with that run. As soon as he attained the 1800 mile goal, he began dreaming about riding 2000. But this time, he could gain very little sympathy. The reasoning of everyone concerned, except Ham, was that since he already held the record, why try again until someone else beat it.

Ham became an agitator. He tried every way he could to get someone else to better his record. He persistently approached

anyone he felt capable of the job but he found no takers. The record still stands.

It was not until the new overhead valve, 74 inch Harley-Davidson motors were announced that he saw new vistas opening before him. He talked the factory into giving him two of the new motors for the purpose of beating the FIM world record for one hour.

This was in 1940—three years after the 24 hour run—and Muroc had been taken over by the air force for practice bombing. At one point the course skirts perilously close to a bomb crater.

Once again the preparations for another run drew to a close. The only thing that remained was to survey the course and set up the markers. They were to make one last trip to the lake on Tuesday, December 10, 1940. Then the following week the course would be laid out and the run made as soon as weather permitted.

That foggy Monday night, the 9th, at seven o'clock, while Ham was on duty, a speeding car flashed by and Ham immediately gave chase. His cycle was wide open when a car pulled out of the fog and into the highway in front of him and he hit it broadside at over ninety miles per hour. He was killed almost instantly.

The tragedy of his death rocked the Pasadena area. To his friends who were familiar with his strength, energy and vitality, it did not seem possible. It had seemed to them that nothing could ever harm him.

The greatest motorcycle funeral procession in the history of Southern California escorted Fred Ham to his final resting place in Mountainview Cemetery on December 13, 1940.

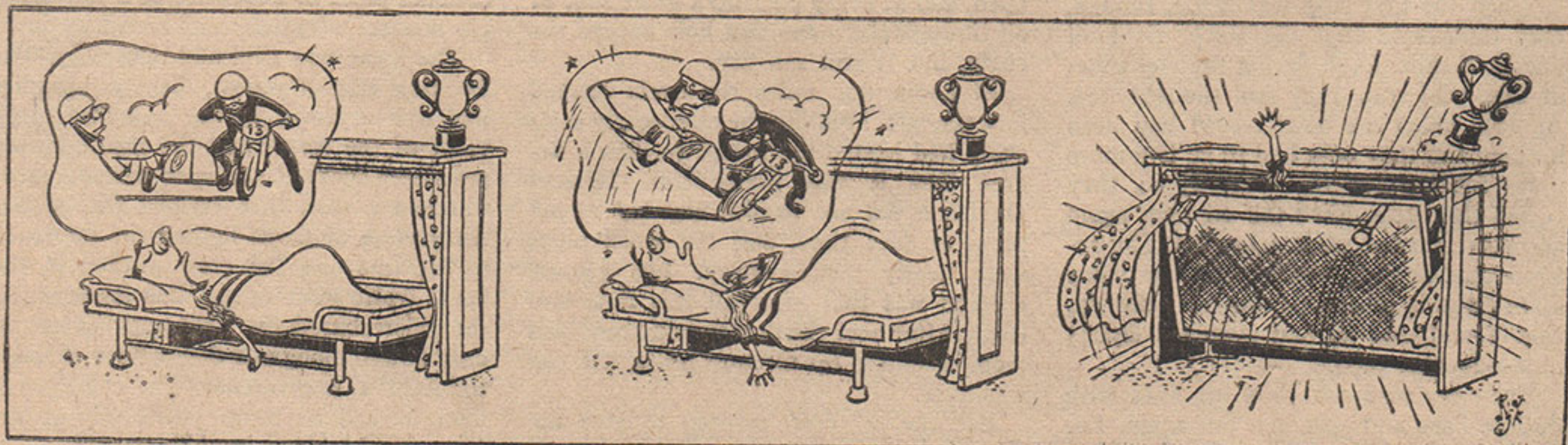
But Fred Ham's name still stands in the record books. No new "iron man" has yet been able to challenge his record.

The words belligerently stand all by themselves in the little AMA record book. 24 HOUR RECORD . . . FRED HAM . . . 1,825.2 miles.

At the time of his death the sweeping five mile groove he pounded into the desert floor during the run was still visible—a ghost of a magnificent achievement. But by now the winds and rain have erased the last faint tracing in the sand. The desert floor has returned to its original featureless state: bleak, timeless, waiting.

BARON BALHOOFD

Courtesy "Motor" Magazine, Holland



THE THIRD ANNUAL MOTORAMA

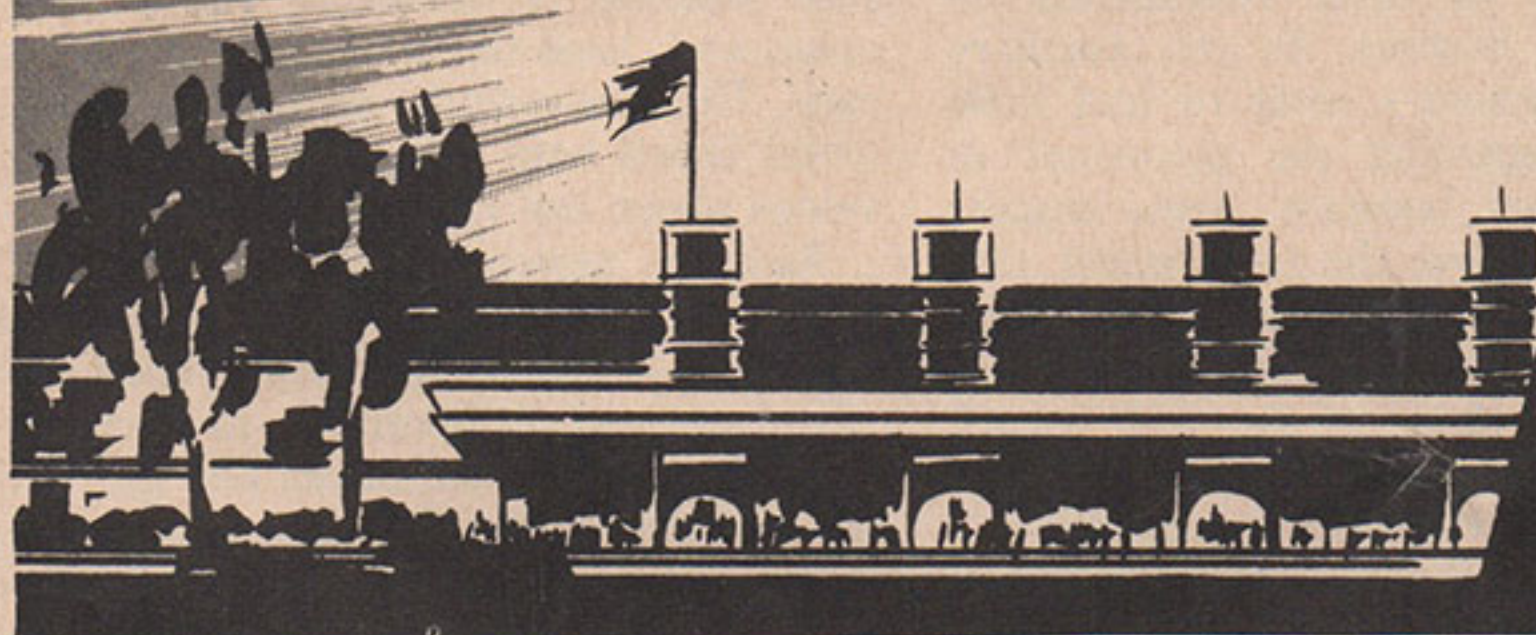
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Contents

SO YOU WANT YOUR CAR TO GO! 7

Experimentation is no longer necessary. Here are the methods that have been proved over the years to be the most satisfactory in giving your car the "punch" that you want

THE HOTTEST STREET HOT RODS.... 11

Here are some of the best dual-purpose machines to be found in Southern California. They are typical of the hot rods to be found all over the country

HOW TO CHEAPLY HOP UP YOUR ENGINE..... 28

If you want more performance for your engine, and can afford the time but not the money, this system is for you

BONNEVILLE CHAMPIONS..... 45

Photos of the nation's champion competition machines

BUILDING A HOTTER ENGINE..... 60

To convert your car so that it will really "storm," follow the instructions given here by "Racer" Brown

ENGINE CONVERSIONS.....105

All the dope you will need to make your car into a real "bomb," whether you own a Buick, Chevy, Chrysler product, Crosley, Ford 6 or V-8, GMC, Hudson, Mercury or Pontiac

LATE MODEL OVERHEAD VALVE ENGINES.....138

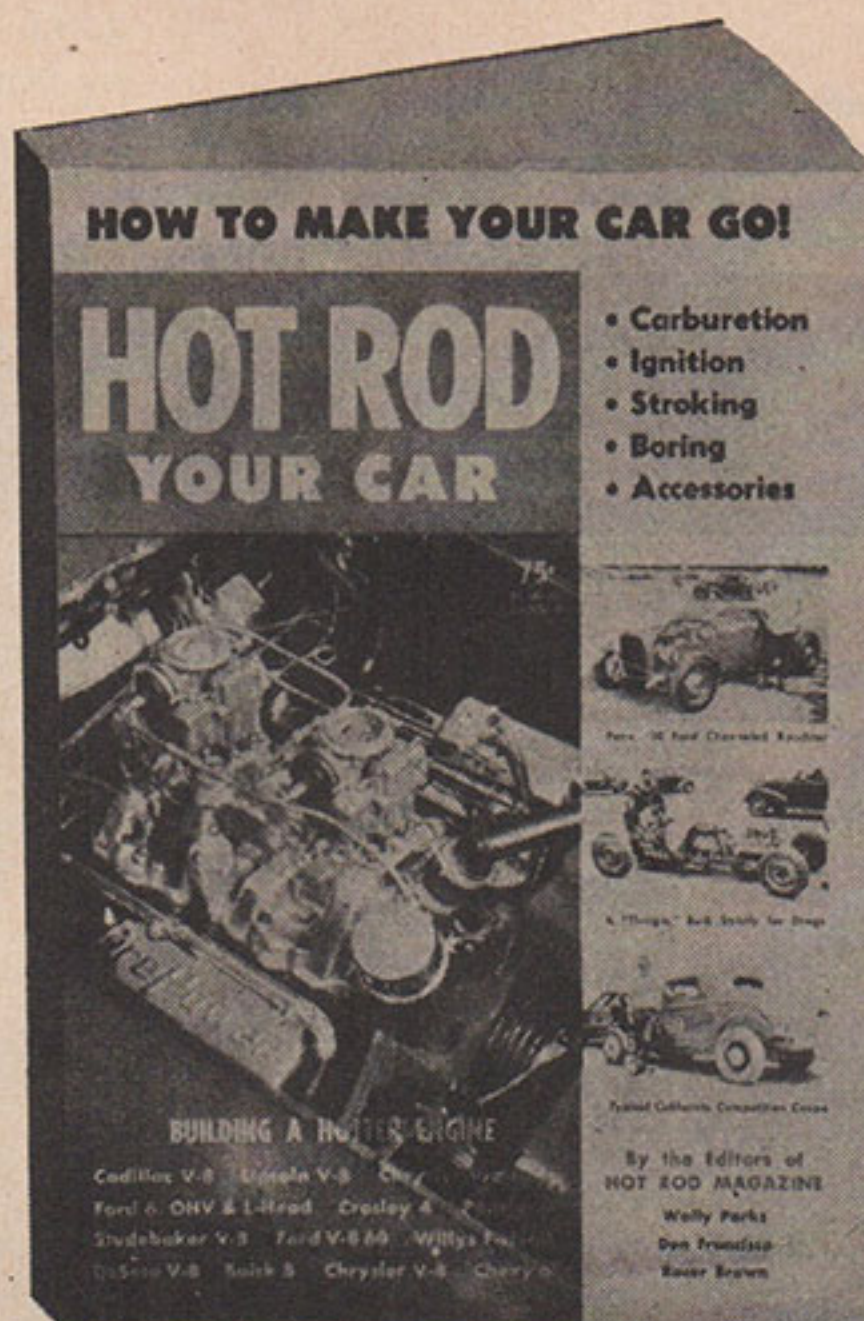
What you might expect from such engines as: Cadillac, Chrysler, Ford ohv 6, Lincoln, Oldsmobile, Studebaker and Willys

ENGINE ACCESSORIES.....148

What it will cost you to buy the various parts that you will need for your hot rod

ALL OUT FOR ACCELERATION.....151

If you're building your car strictly for "jump," you'll be interested in analyzing these "draggins" wagons"



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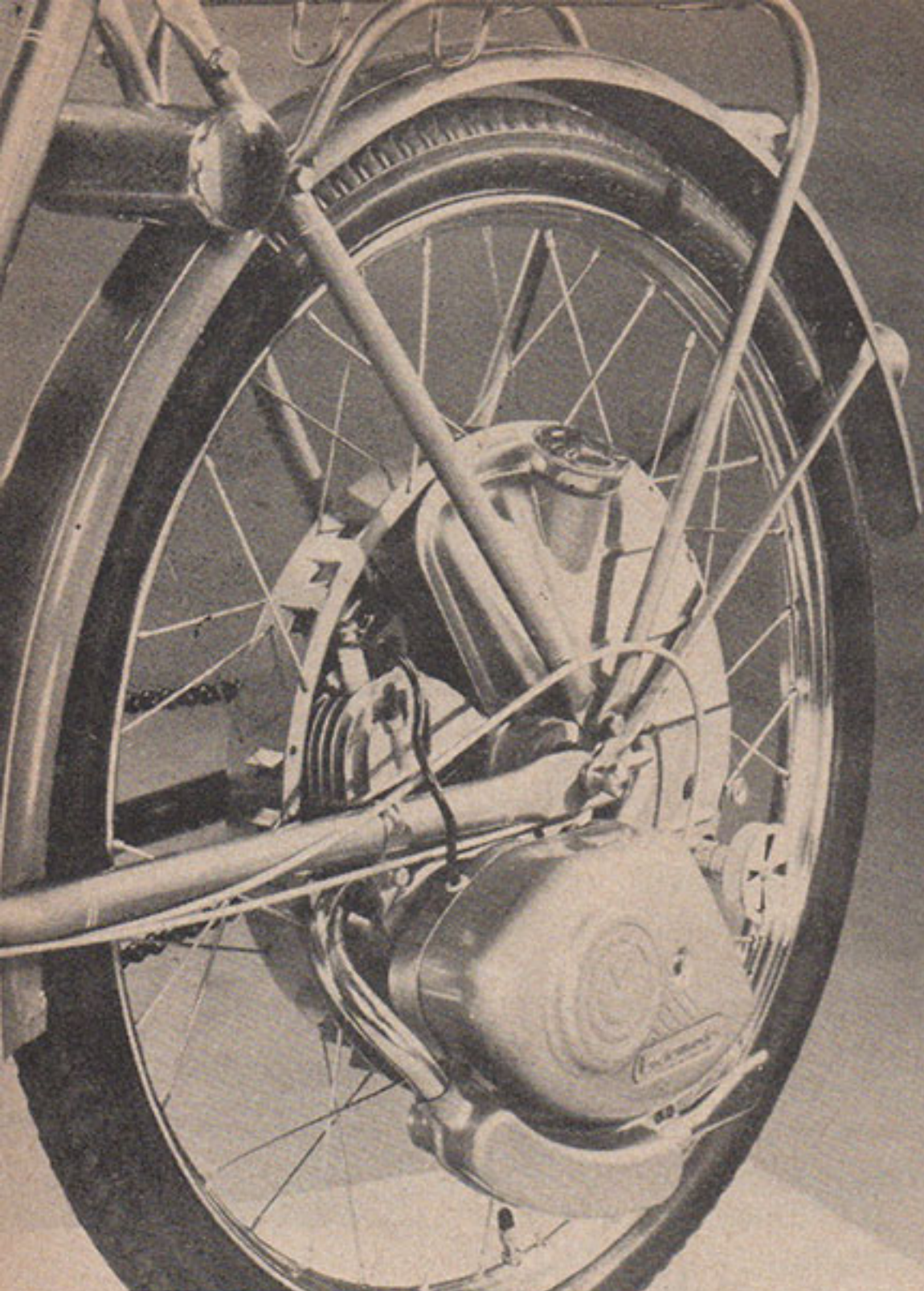
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The Pedal Poppers

WHAT'S DOING WITH THE "CLIP-ON CLIENTELE"

By George Glaser

Photos by Universal Trade Press and Gunter Nieman



ABOVE, The "Cyclemaster," or Rabeneick "Taxi" as it is known in Germany, is a complete power unit within a wheel, including both gas tank and exhaust. This 32 cc single cylinder two-stroke has a 36 mm bore, 32 mm stroke, 6.4:1 compression

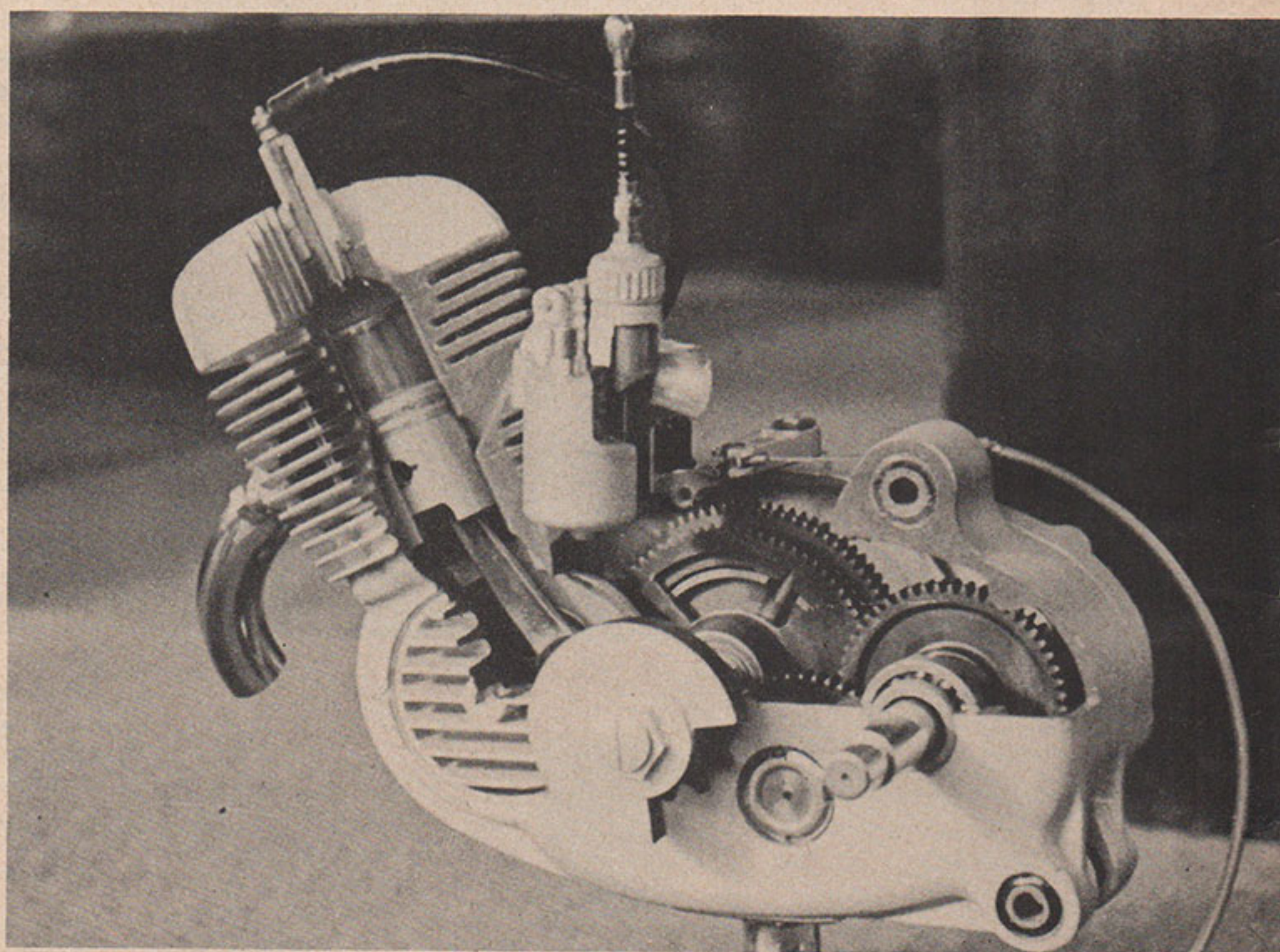
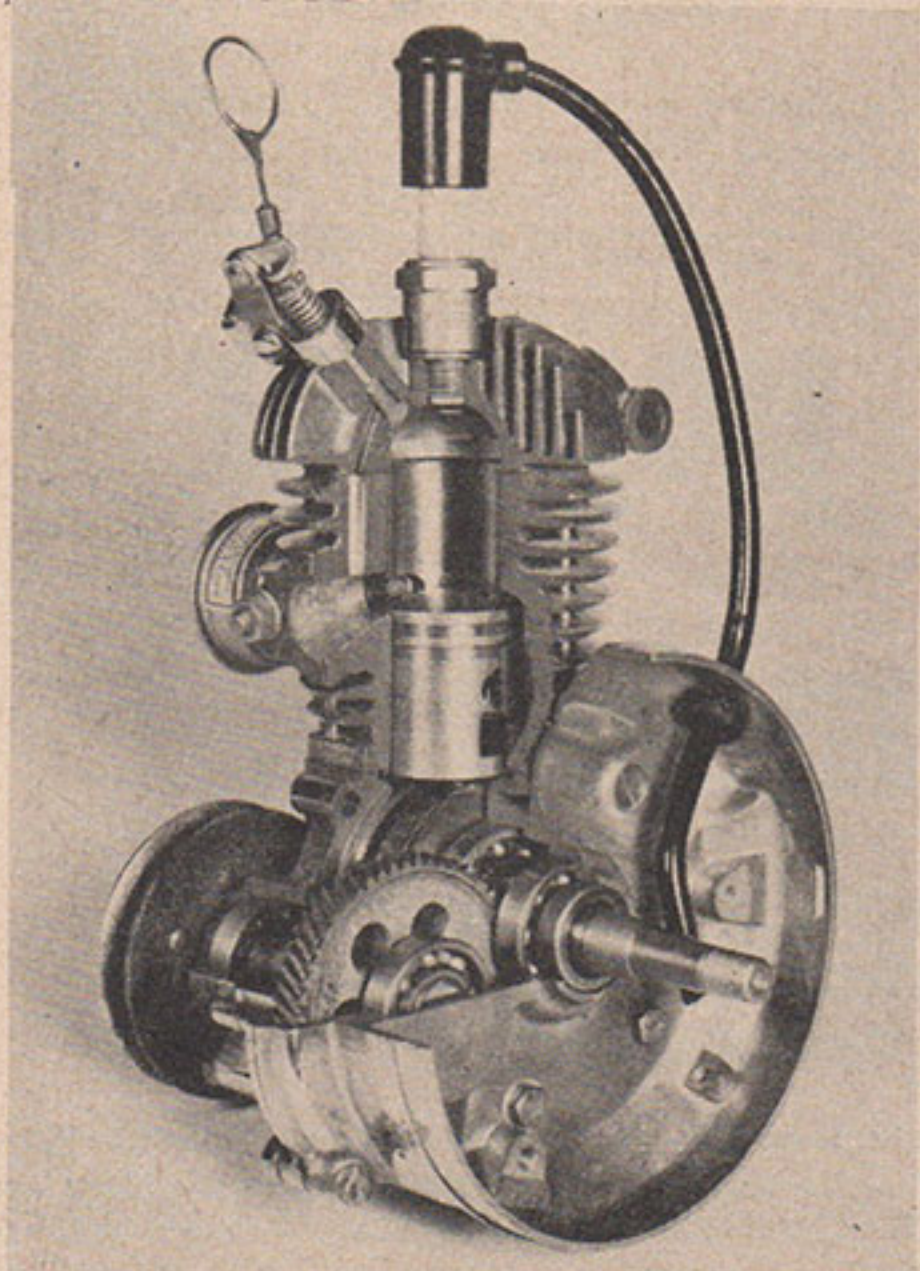
FOR THE MILLIONS who are using the bicycle as a means of transportation and not as a sport, the addition of a power plant to take over the burden of propulsion means an introduction to motorcycling. Western Germany recently recognized this fact and since April 1, 1952 motors up to 50 cubic centimeters no longer require licenses. As yet, auxiliary engine manufacturers seem to find little in common regarding the placement of their tiny power boosters. Some engines are positioned above the front wheel. One is even built into the front wheel, while still others are suspended from the center of the frame or over the rear wheel. While two-cycle engines are common, some four-cycle engines are available.

In Ingolstadt, Bavaria, near the famed Autobahn superhighway, is the world-renowned Auto Union factory, Saxonian producers of motorcycles and cars. At this

LEFT, Light alloy cylindered 34 cc Rex bicycle motor has a "square" bore and stroke, both are 35 mm. Flat-top piston is unusual in two-stroke practice. Over 50,000 have been sold

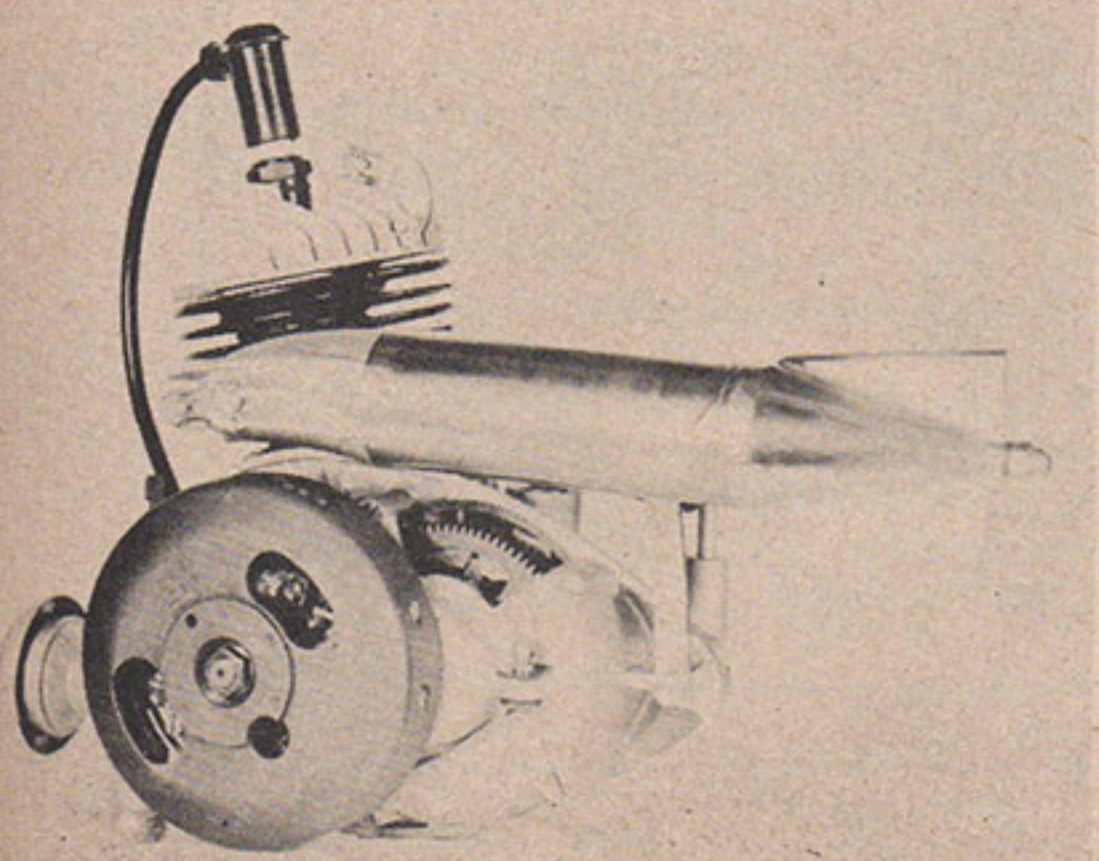
plant Dick Küchen Jr., one of Germany's leading engine designers, has developed an outstanding auxiliary bicycle motor. The Küchen 38-S operates on the two-cycle principle, but in place of using the three port system by which the piston controls the gas-air mixture flow into the crankcase housing, a revolving sleeve valve opens and closes the intake into the crankcase. This one-cylinder midget has a light metal barrel with shrunk-in liner and develops about one horsepower.

Another newcomer to the "clip-on" trade is the Velmo Motor Company of Hamburg, Northern Germany. Their idea varies somewhat, inasmuch as their entire engine drive mechanism and gas tank are included within the front wheel. This wheel can be placed on any standard bicycle wheel and can be attached within a few minutes. The whole unit is completely encased, giving a look of elegance. Their 32-cc motor has aluminum alloy cylinder; its inner bearing surface sheathed in hard chrome for long wear. Here again the gas mixture is inducted by a rotary valve. Power transmission and reduction drive



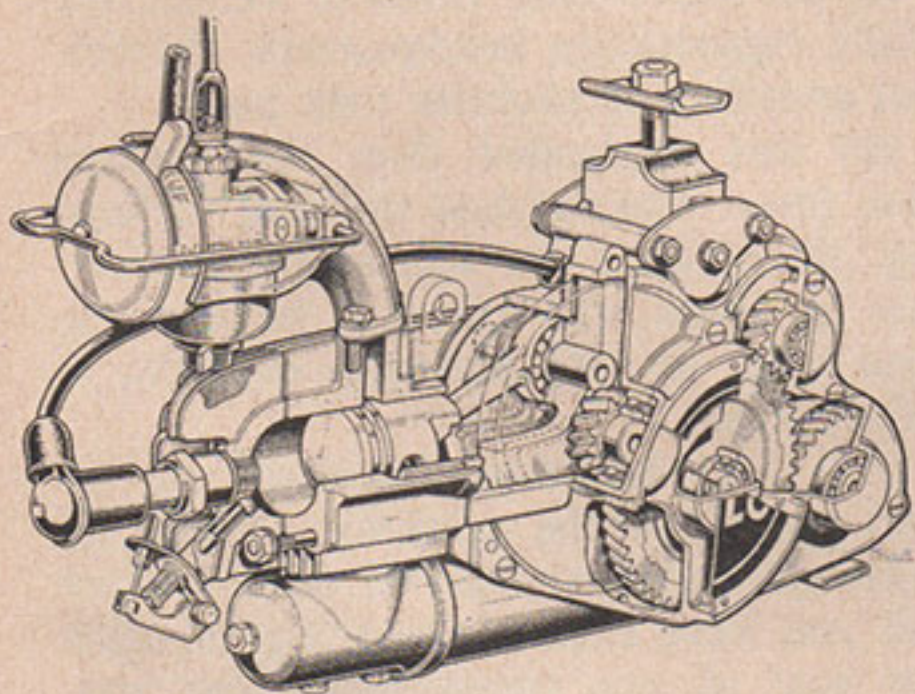
LEFT, From hotbed of German motorcycle production in Nuernberg comes amazing Vicky, record holding speed mill; 38 cc (2.3 cu. in.), 1 h.p.

ABOVE, 50 cubic centimeters is hardly enough to pull the slack out of your suspenders, but can you name a more beautiful job than Kreidler?



are novel, consisting of a screw and gear arrangement with final drive in the form of a plastic pinion gear. This pinion turns a large gear, which is attached to and motivates the outer spoke wheel. Fuel consumption is approximately one quart per 60 miles at a speed of 18 mph.

Possibly the smallest of all is the Lohmann, a single-cylinder two-cycle type but without electrical ignition equipment. The Lohmann operates on the diesel principle of self-ignition due to the heating of the highly compressed air-fuel mixture. Its capacity is only 18 cc, or about half that of the other clip-ons. The fuel, by the way is kerosene and the mixture is made by a mixer unit rather than a regular carburetor. While a true diesel takes only air in and receives the fuel by injection, this Lohmann takes in the air-fuel mixture through the crankcase like any ordinary two cycle engine. Another unique feature of the Lohmann is the cylinder liner which can be moved by the driver in order



The 110 F-48 is popular with manufacturers. This 48 cc (2.9 cu. in.) model cranks out 1 h.p. at 5500 rpm, is tax and license free in Germany

to adjust the compression during the operation. Quite a number of interesting pioneer features have been built into this small engine. The little motor has been equipped with two mufflers, one for the intake noise and one for the exhaust, which is a necessity as this mechanical *bumble bee* can create quite a roar due to the high compression and revolutions. It weighs about 11 pounds and develops up to $\frac{3}{4}$ HP at 5,000 rpm.

Among the many such pedal aids, the most recent to receive worldwide recognition is the Vicky two-stroke produced in Nuernberg by the Victoria Motor Works. Their Tom Thumb powerhouse uses a flat top piston, a rarity since most of them are domed to better direct the flow of gas. The Victoria has its own system of governing the flow. Their 38-cc mill is equipped with a flywheel combination of magneto and generator and delivers one horsepower. A two-speed transmission operates through the expander ring type of clutch. Power is to the rear wheel by an adjustable chain. More than 40,000 units have already been produced. In 1951 this mighty mite, enclosed in a streamlined shell with its rider lying flat-out, annexed two world's speed records by running 48.9 miles per hour—this with an engine which has a piston smaller than a large thumb!



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BATTLE IN THE CLOUDS

continued



Wolfgang Denzel climbed with his 600 cc BMW, producing a terrific average of 37.9 mph. The mountain trail often reared up at a 36% grade

much slower in higher altitudes, not to speak of the reduction in speed caused by climbing.

"Another technical difficulty at the Alpine Trial is the fact that the thinner air, combined with the increased requirements in the engines' power output, cools the engine much less, and thus the circulating oil, than in normal altitude.

VARIANCE IN ALTITUDE OF 3,978 FEET OVER 208 MILES ON SECOND DAY

At 04:00 AM, the next day, 90% of the first day's starting riders took off for the final day, still showing the previous day's strain in their faces—this fatigue changing into concentrated alertness when approaching the starting line in Velden.

A "mere" 115 miles were to be driven before the much feared mountain speed test, starting at an altitude of 3,258 feet and leading over a murderous 4.7 mile stretch (or worst type road) to the 5,289 foot high peak of the Turracher Hoehe.

After an hour's "commandeered" rest before the test (obviously to relax arm and leg cramps and to ease aching backs, but also to allow the riders to deflate their tires a few pounds to gain more traction up hill) the cycles started peak-ward. Schorsch Meier topped them all with an average speed for the 4.7 miles of 43.1 miles per hour. Austria's Volkswagen converter, Wolfgang Denzel (who uses the chassis and the engine of the German People's car to make his own version of a speedy, curve-hugging super sports vehicle—which won the aces' ace honor at the same automobile trial) followed with 39.65 mph. Roaring upwards, the class 9 (consisting of German 600 cc BMW cycles only) executed a minimum speed of 33.6 mph—the average speed of the slowest contestant.

The three Horex topped in class 10 again, in unity, ahead of the three Matchlesses, one Jawa and one BSA.

Again, the Austrian Puchs in the 250 cc class (with a new test model, the SGS 250 cc) dominated this class. Their transmission ratio, constructed in accordance with the hilly Austrian terrain, proved superior to other cycles which, in turn, showed partly higher speeds during the previous day's speed tests. Three Puchs,

and one German Triumph reached above the 32 mph mark, while the slowest came in at a speed of 25.11 mph (average).

In the class 12 (up to 175 cc), Germany's Hans Dangler made the first place, closely followed by the Puch Company's chief mechanic, Josef Fussi from Graz, Styria. After him, a German Hecker (a relatively new brand) two more Maicos, and more Puchs, the last cycles to be overtaken by the next class, the 125 cc (and below).

The first four in this class were Austrians, both in the mountain test and the later overall tabulation, the fourth Zezula, from Winer Neustadt (Soviet-occupied zone of Lower Austria) topping with 26.05 miles per hour and an overall collection of 133 positive marks to make him the Edelweiss winner in the 125 class.

The sidecars arrived at the Turracher Hoehe's peak about the same time as the class 11 group, led by star driver Wiggerl Kraus, on a BMW. Kraus, the later winner of the Alpine Pokal, the Silver Edelweiss, and the Golden Medal, averaged a speed of 32.05 mph, distancing the Zundapp KS601 driven by Kritter (who put up a very good show of driving "know how") and before the Austrian Schichl, on a BMW 750 cc.

BMW driver Max Klanckermayer again won first place before Viennese Zabokrcky (on a BSA 500 cc).

In the next smaller class, the sidecars up to 350 cc, Ondreas was as fast (21.6 mph) as Ebert on a Victoria 250 cc. Krammer, driving a 250 cc Puch, was handicapped in the same way as was Ebert, driving a cycle with a power plant of 100 cc (6.10 cu. in.) piston displacement, smaller than the permissible volume—and the one which the winner had.

The weather, changing towards sunshine with moderate heat as the first vehicles came close to the finishing line, had invited a huge crowd.

Cheering the mud-crustured heroes of the mountainous paths, the international guests of the famous Velden resort stood for three hours to see brave drivers and tough vehicles finish the trial.

While for the contestants, the technical inspection was likely to bring vital decisions concerning victories and medals—or defeats—the organizers of the event finished the arrangements for the late evening celebration of the winners.

COMPETITION ISN'T OVER BEFORE COMPLETING THE TECHNICAL INSPECTION

A rider, finishing without a negative mark on his starting card for both days could—and did in a few cases—lose the golden medal by discovered losses or damages of accessories, or damage to his cycle. The regulations, in providing that all vital parts had to be marked before the trial—and pre-race damages registered—made sure that all damages to frame, engine, or accessories were penalized justly.

The loss of or damage to the fuel tank, handlebar, foot rest, pedals, battery, coil, horn, carburetor or lights was punished with two negative marks, while deforma-

tion or loss of the fenders, the sidecar, exhaust pipe, or muffler cost five marks. A total of 10 marks was charged up for damages to frame, suspension, shock absorbers, and wheels, while a top tag of 100 marks (thus practically eliminating the contestant from the final consideration) was given those who damaged their engine—or even knocked the oil pan into leaking.

Weight in the sidecars, where no second person was along, was checked; this control being unnecessary for Vienna policeman, Keck, who had his mother along as "grease-ball." She loudly acclaimed her son for his good driving at the inspection.

The last check was made on the number of spare parts; then, the lead seals, wired to securely connect the cylinder block with the cylinder head, were checked, and the seal from the front start number plate to the frame.

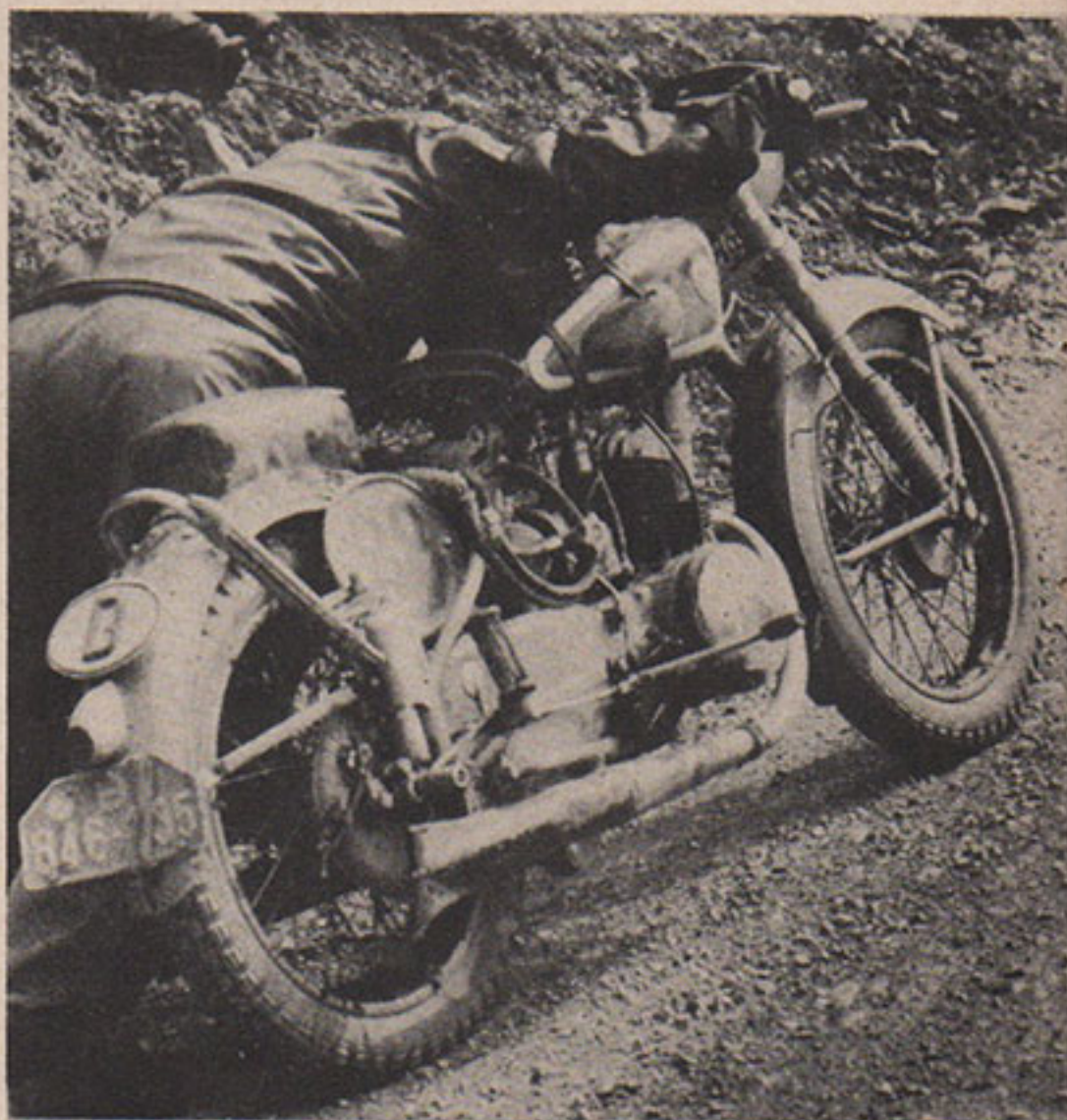
HILARIOUS CELEBRATION NOT ONLY FOR THE WINNERS

At the Moeslacher Hotel in Velden, the trial's organization headquarters, the formal awarding ceremonies took place:

No less applauded than the winners were those who finished the trial without any actual hope for official recognition; that is, those who came in beyond the time limit, or with extensive damages to their cycles.

Said Dr. Mauthner-Markhoff in his final speech at the ceremony: "You all have—as amateurs—shown deep interest and you have risked everything to reach the goal of our competition. You participated in this 1952 Alpine Trial for the sake of sportsmanship and for the sake of motor sport."

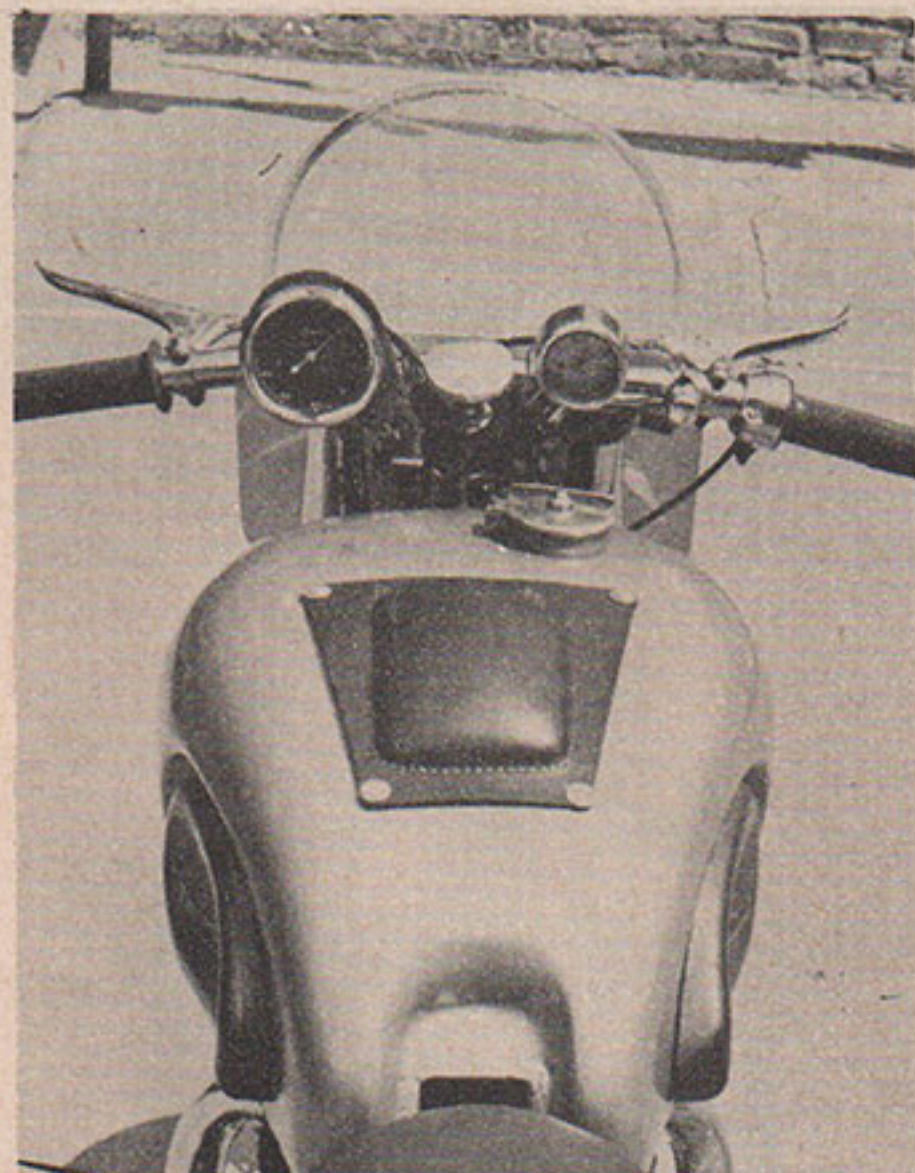
"The records all of you have achieved made this competition a success and you have acted to add a page of honor to Europe's motorcycle sport's history. For this, the thanks of Austria, as the host in this event, and appreciation for this expression of Europe's motor sports spirit."



Physical demands of the journey were such that riders often collapsed next to their machines. This weary soul is using his last strength to push his machine with running motor up a ravine

(Continued from page 11)

thing is concentration. Your handling of the bike must be absolutely automatic. All your attention must be directed to proper braking and shifting and the best placing of the bike on the course itself. At the start of a race, if it isn't going to be too long . . . say about 25 miles or so, I try to go as fast as I can the first three or four laps without straining myself or my engine. Somewhere along the course I try to have some dependable friend give me the word as to whether or not I am leading; and if so, by just how much. Then I can better judge whether to slow down and save the engine or not. There's no point in winning a race in five or six laps when you might burn up your engine

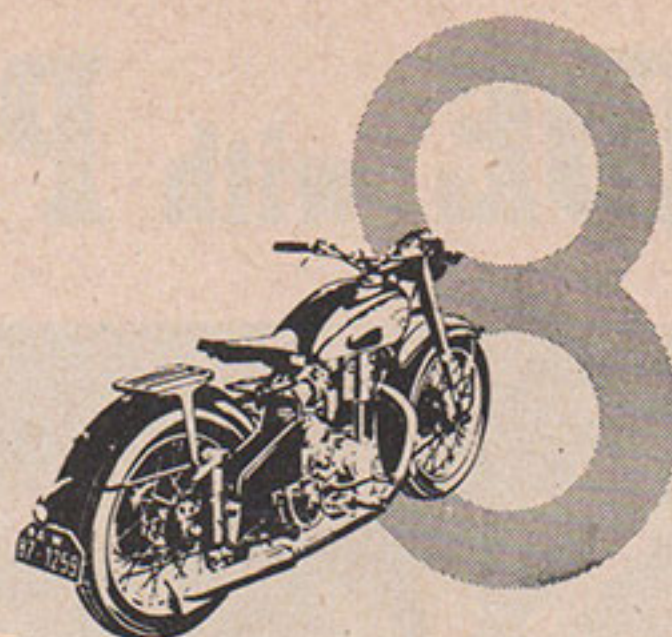


Racing view of controls: oil pressure, right, and tachometer on left. The tach is a constant guide by which the rider makes all of his gear-shifts

or risk a spill attempting it. Always keep checking on your tachometer out of the corner of your eye, for the tach is the bible you shift and run by.

As for the best clothing to wear, I looked around the closet at home until I found an old pair of boots with real thin soles on them. It is easier to feel a gear change with these on. Remember to wear leather gloves so that you don't skin up your knuckles or take all the hide off your hands in a spill. Always try to have a shirt tail long enough so that it doesn't suck out and flap in the breeze. Keep crouched down as low as is comfortable and go like the wind."

Briefly then, these are a few of the highpoints in road racing. Whether or not America will buy it depends entirely on the promoter and the rider. So far, the events have been run off with a great deal of order and neat appearance. We must remember that the spectators love to see beautiful machinery handled by riders who are both colorful in spirit and in dress. Aside from the fundamental groundwork that comes with successful promotion, we must somehow inject the showmanship that has been instrumental in popularizing this type of racing elsewhere.



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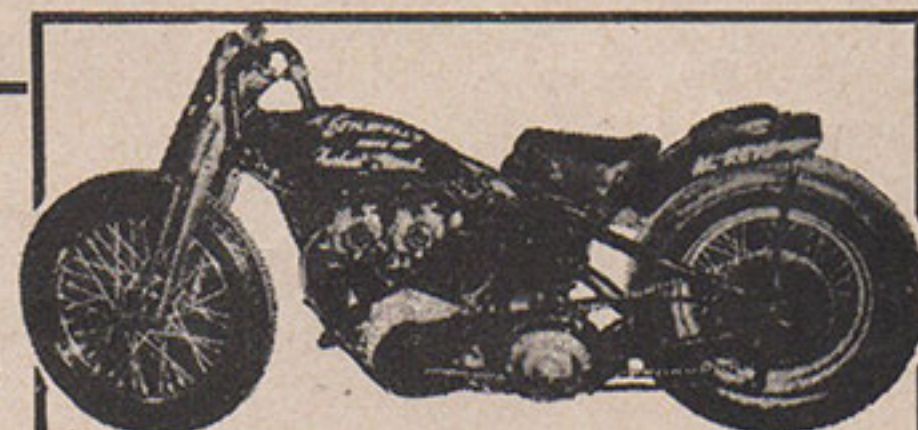
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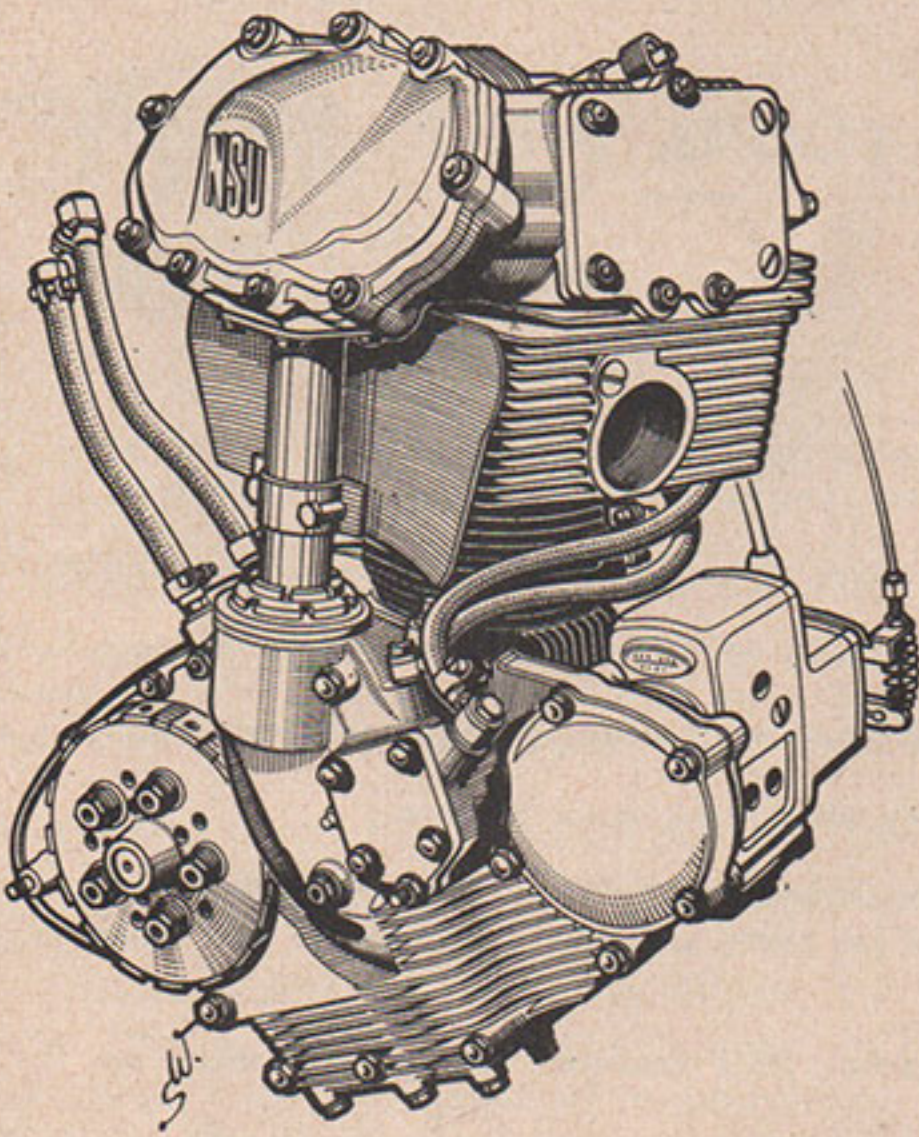
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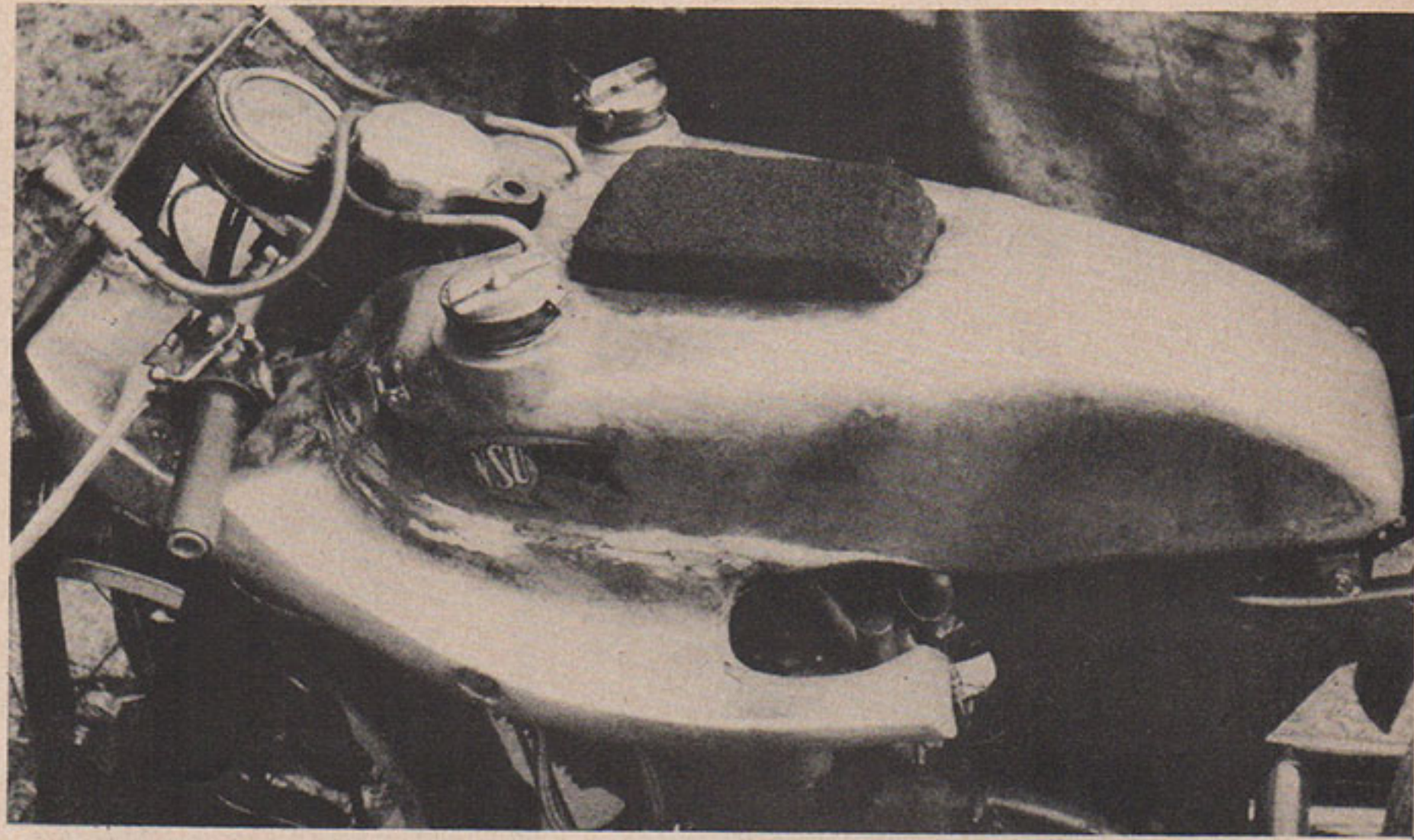
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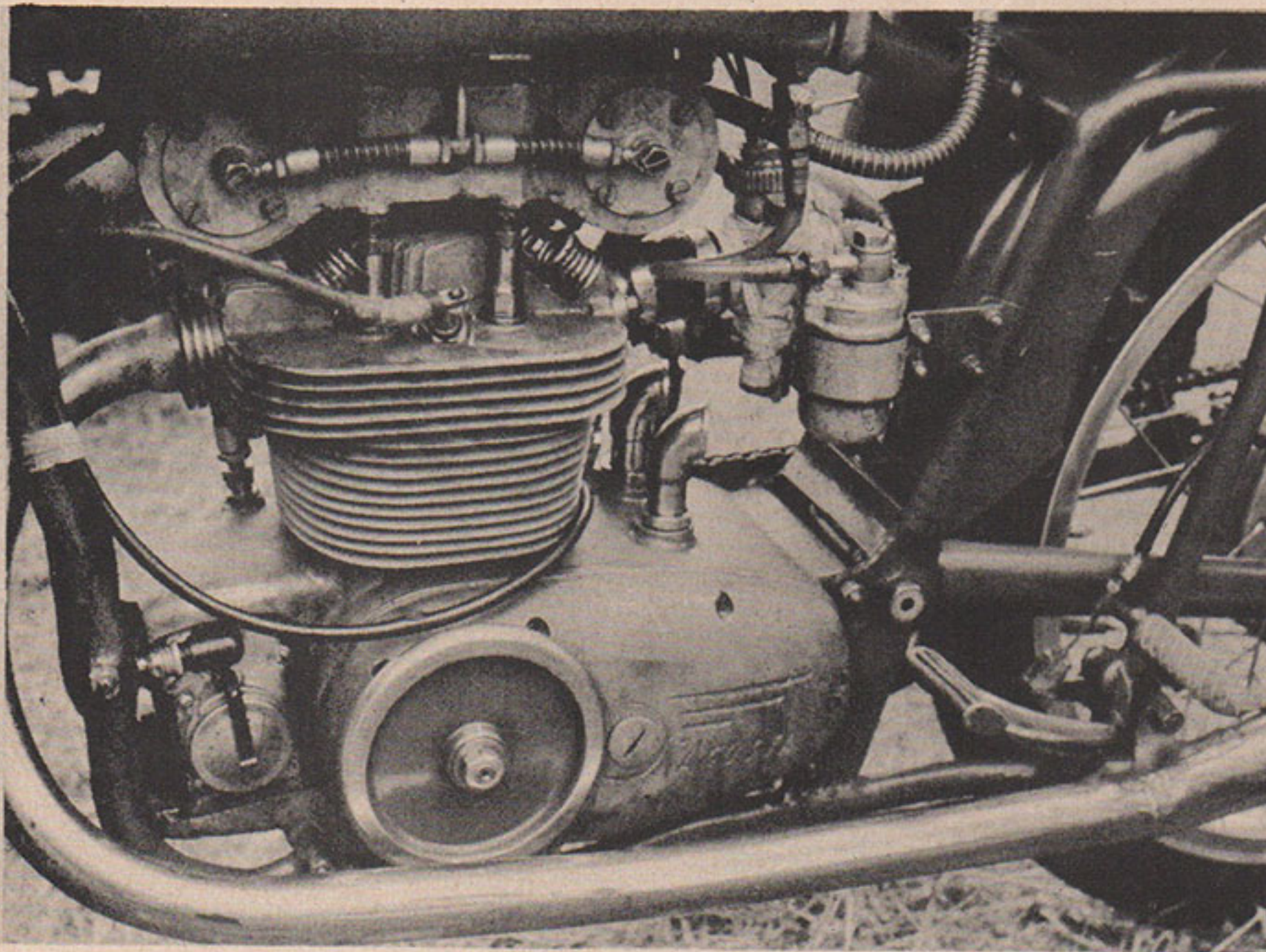
TRACK SIDE with PEN and LENS



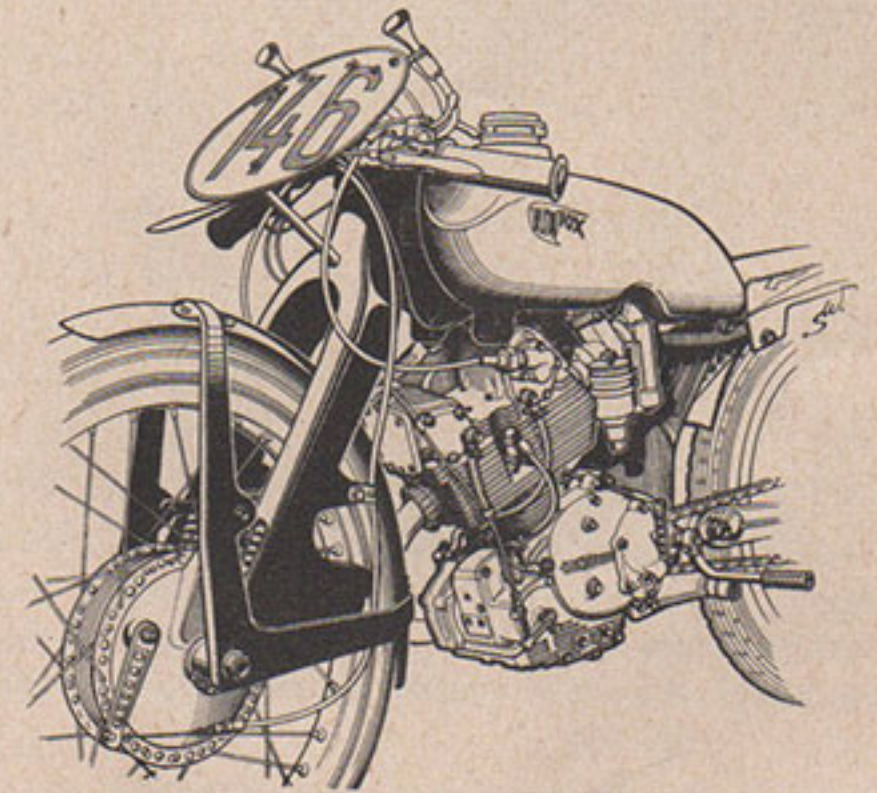
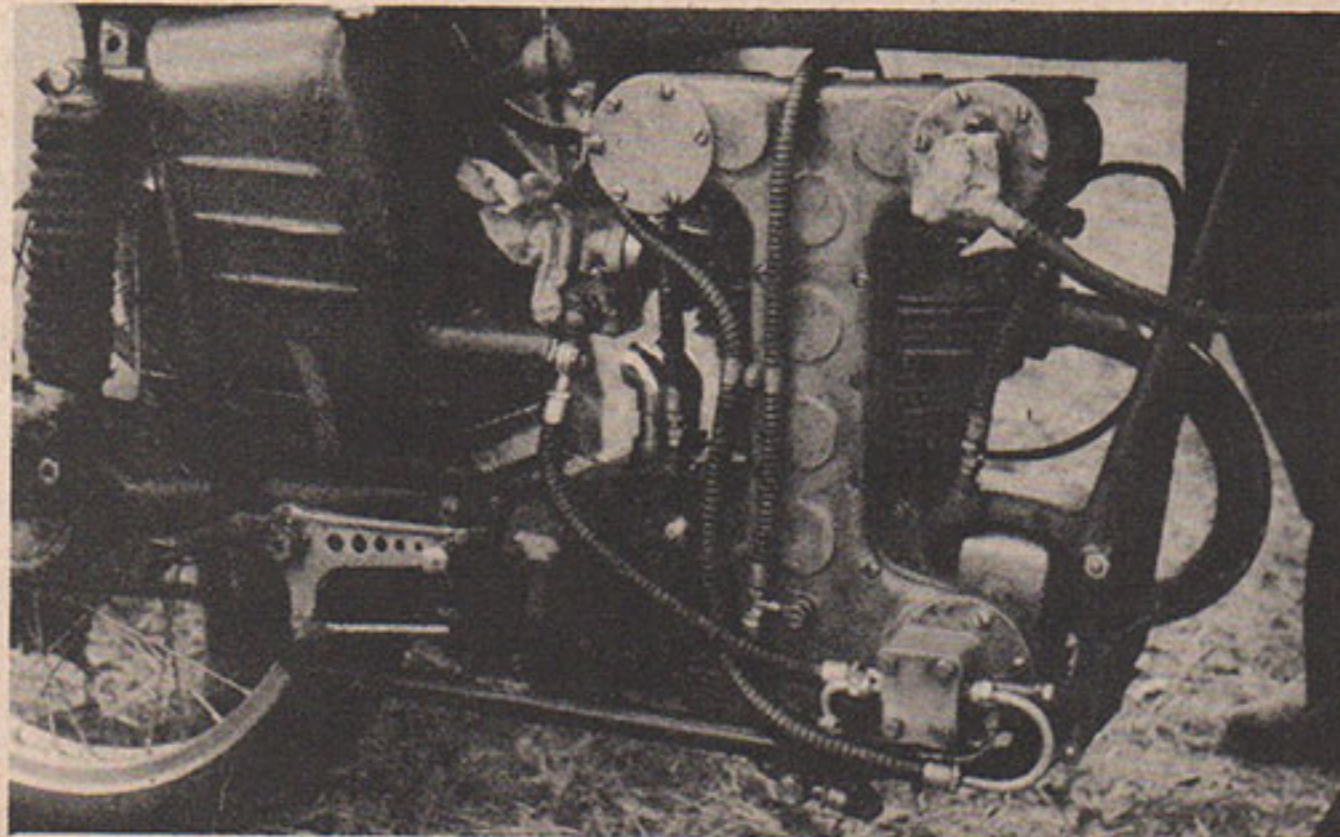
NSU's racing Fox is today by far the fastest 125 cc German machine. This double overhead camshaft single turns out about 4½ hp, 93 mph



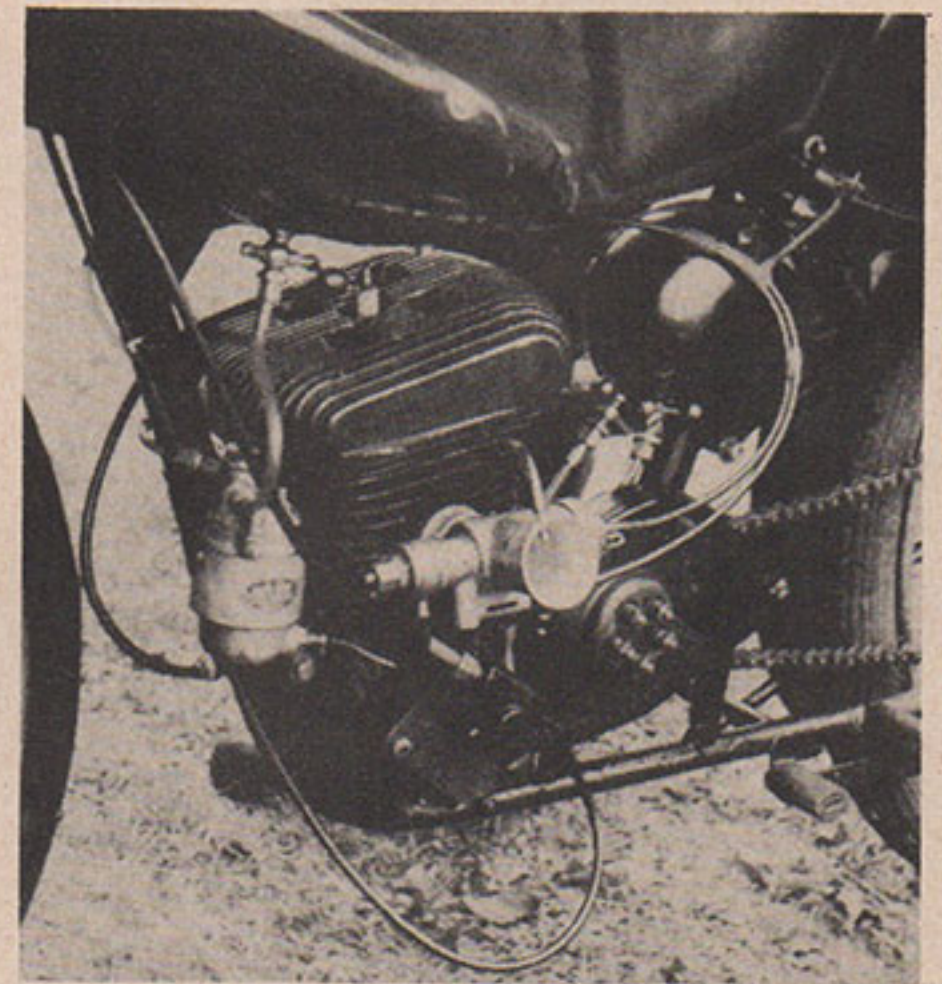
Gas tanks with built-in arm supports are used this season on the Fox to lessen the prone rider's fatigue. This machine won the World's Championship in the 125 cc class. Small air tubes running from the front number plate create assisting gas tank pressure



The powerplant of another mighty miniature, the MV single-cylinder overhead cam racer, with outside flywheel. Air exhaust (breather) tubes and remote float bowl are directly behind cylinder



Huge cooling fins make it hard to believe that the 125 cc Fox is not a big 500 cc machine. Note the absence of the front frame down-tube. Novel pressed steel forks are short swinging arm type



ABOVE, The Spanish Montesa employs two-stroke 125. Lubrication is simple—a pipe leading from oil tank to carburetor in-take pump. When motor is working, a few drops are sent to motor

LEFT, Right side of the same MV Agusta 125 reveals a maze of flexible oil lines, an alloy gear-train cam tower, most modern rear suspension

The Effects of International Competition Are Awesome but Unobtainable

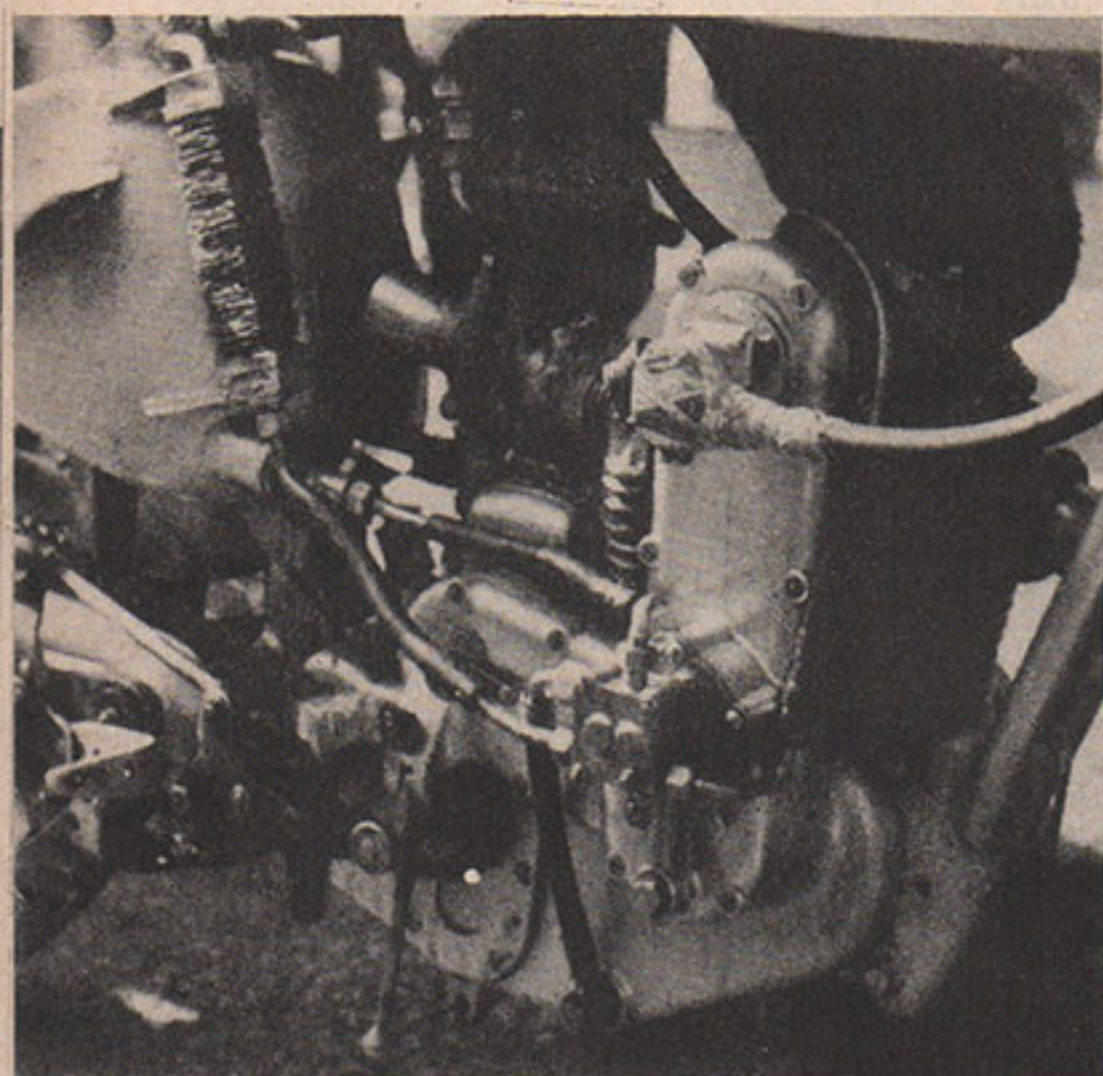
PHOTOS BY

Kurt Wörner

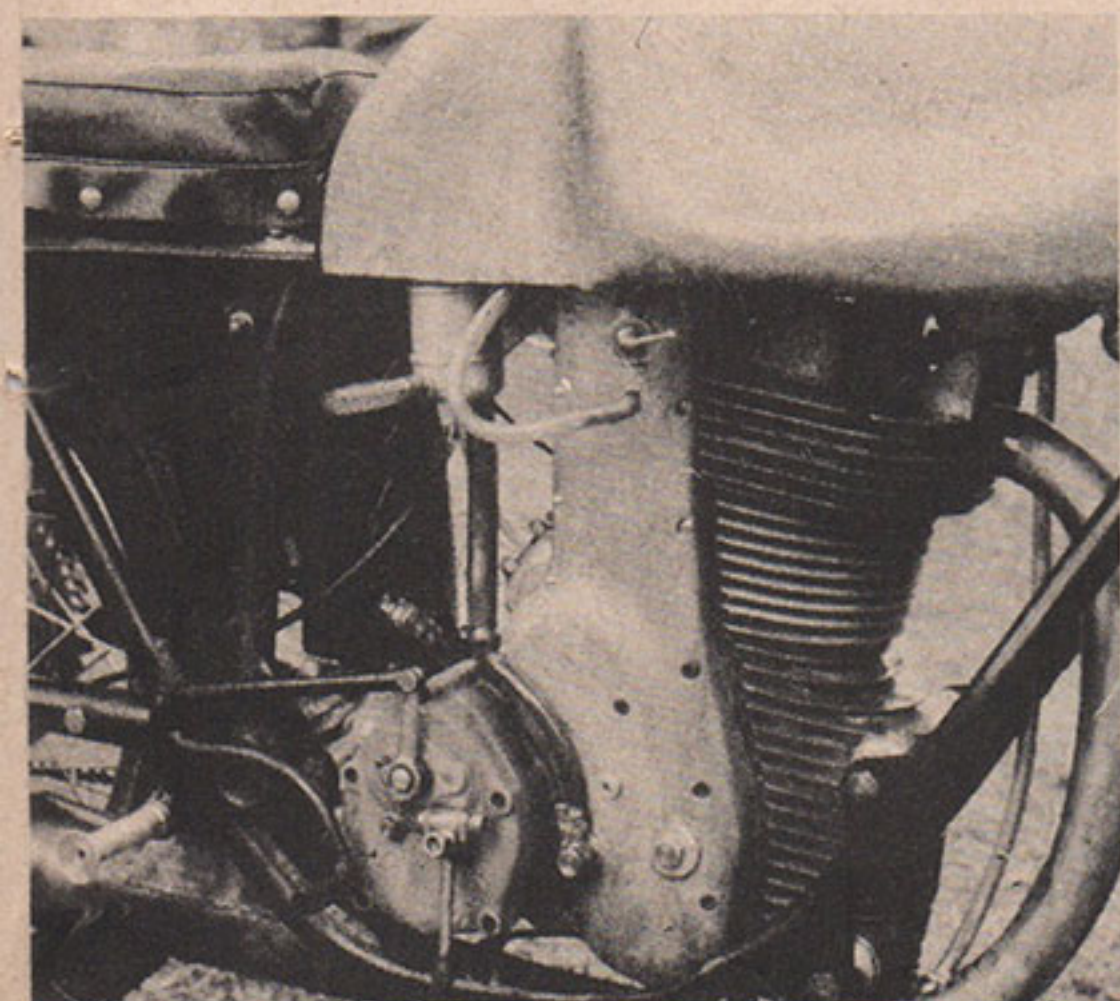
Rodolfo Mailander

ILLUSTRATION

Sigfried Werner



Ever seen a Morini 125? Although not as elaborate as others, single OH cammer is a real pint sized tornado with unit-constructed gear box. Note cooler incorporated in oil line, tach drive



Latest 350 cc (21 cu. in.) Horex OHV single is of German origin; completely finned cylinder base

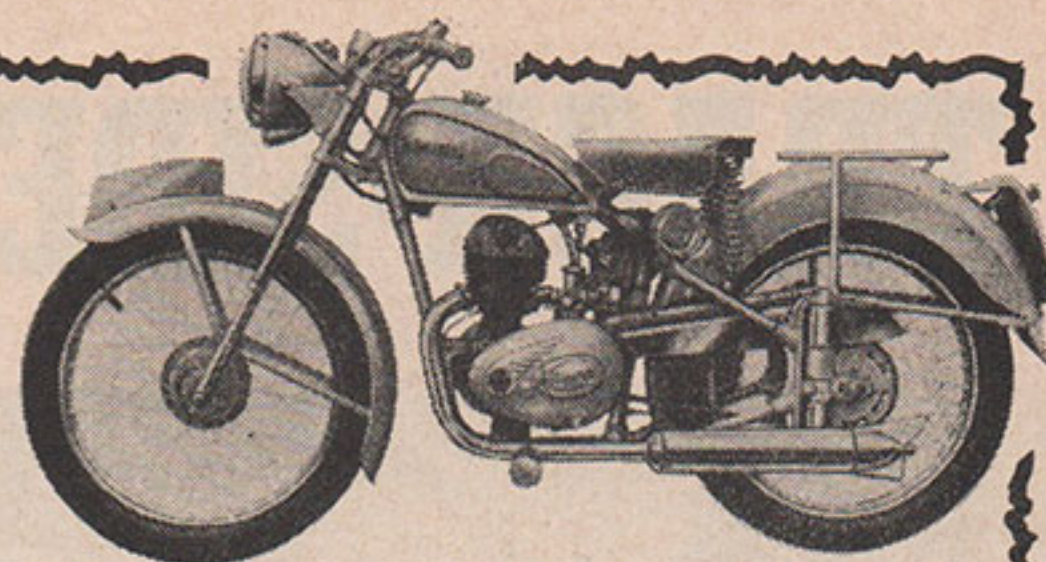
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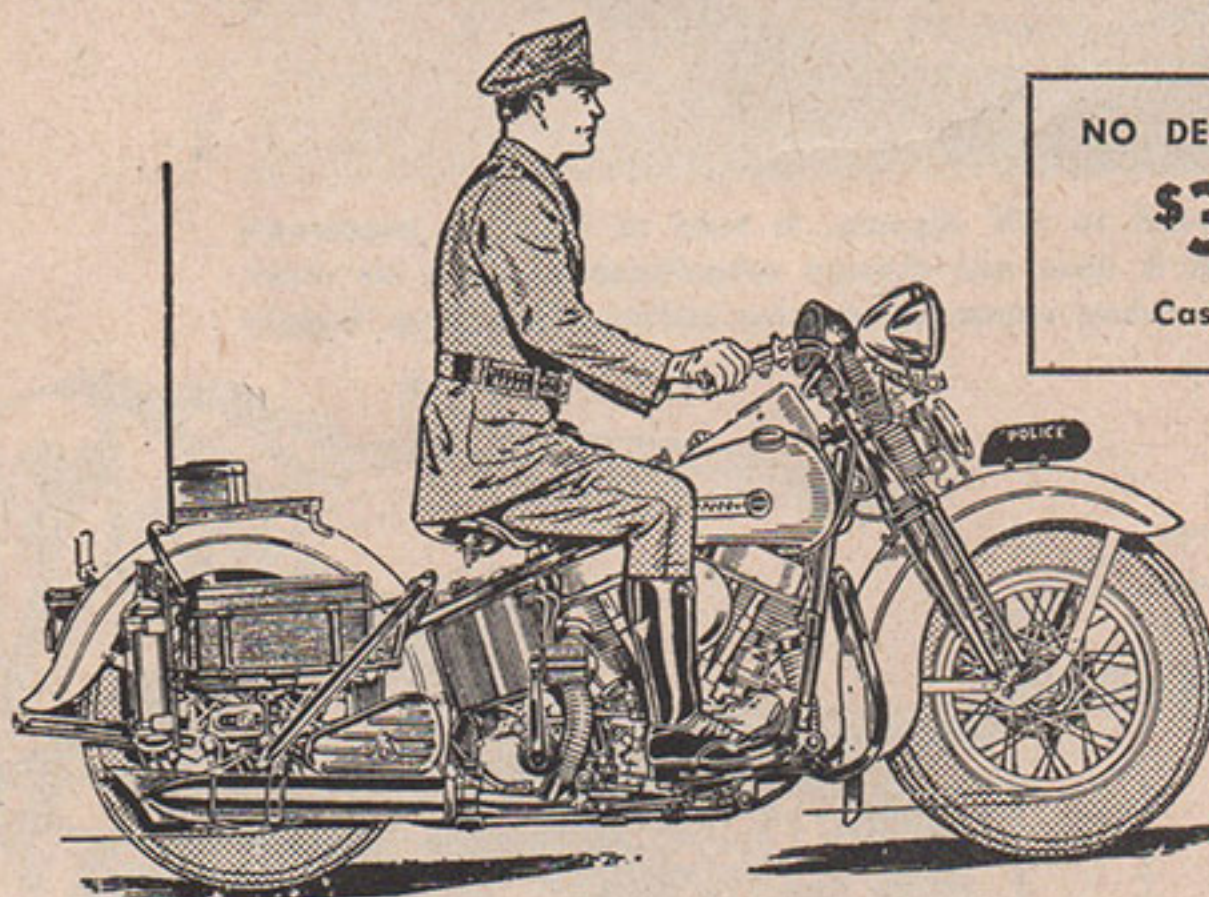


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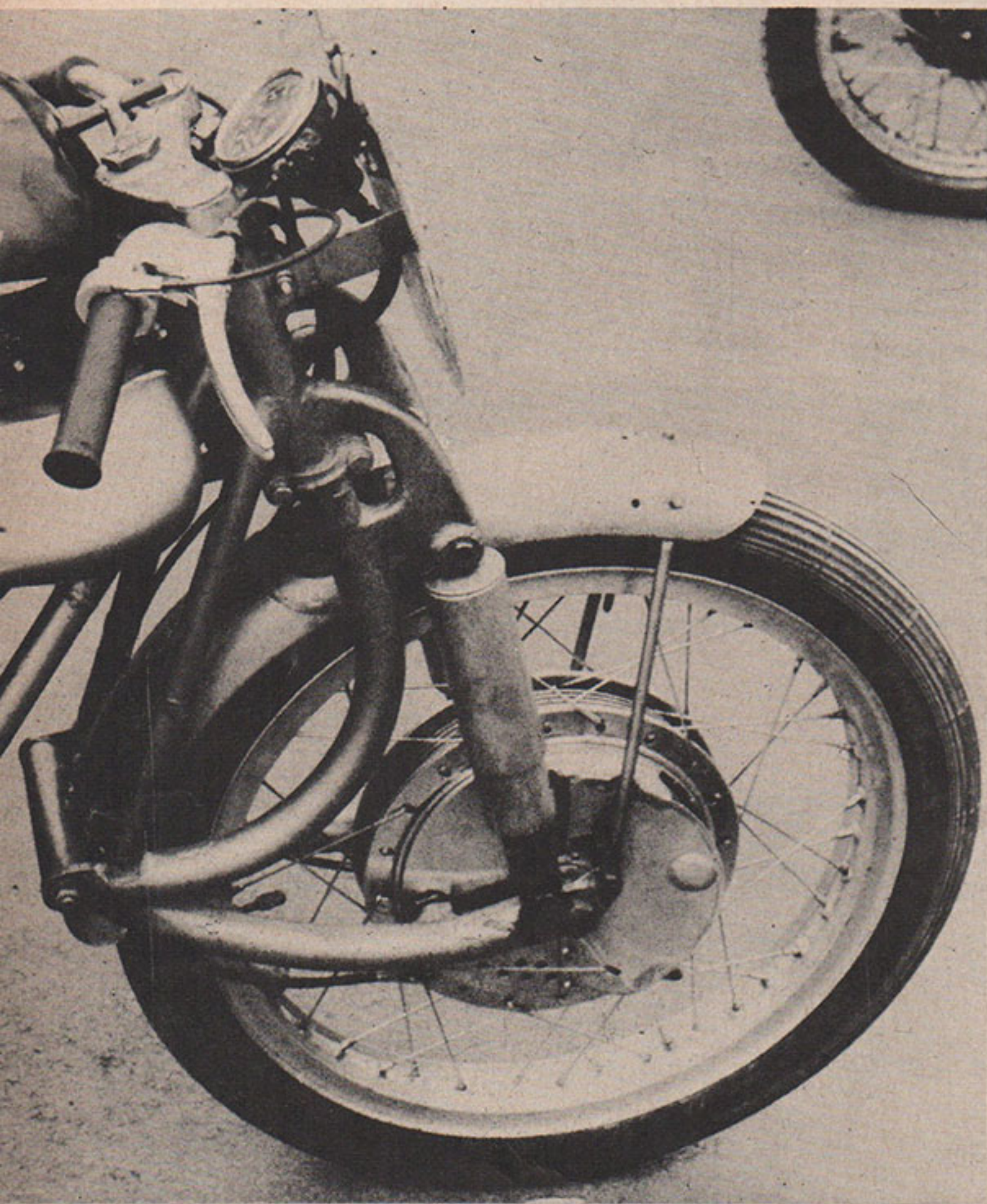
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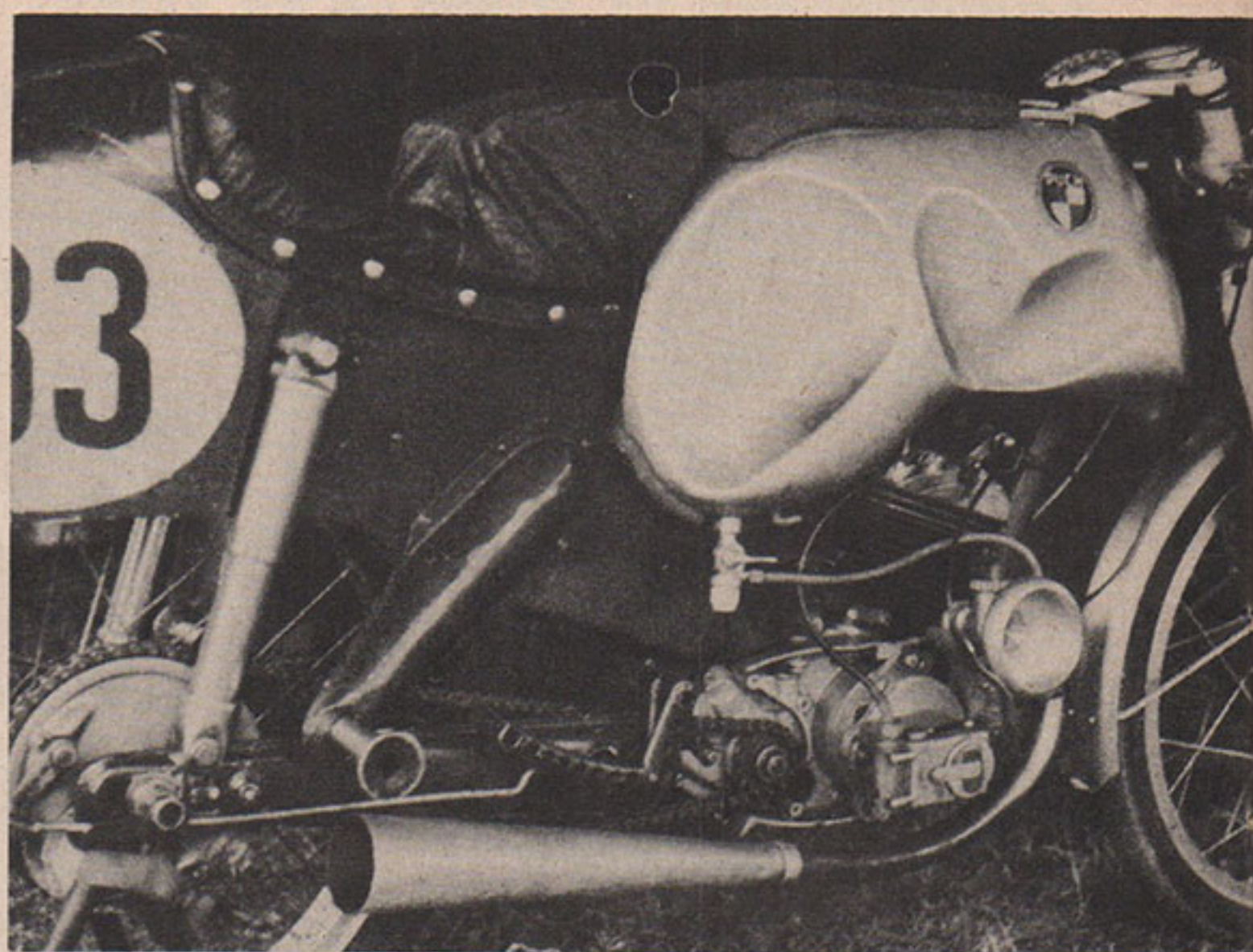
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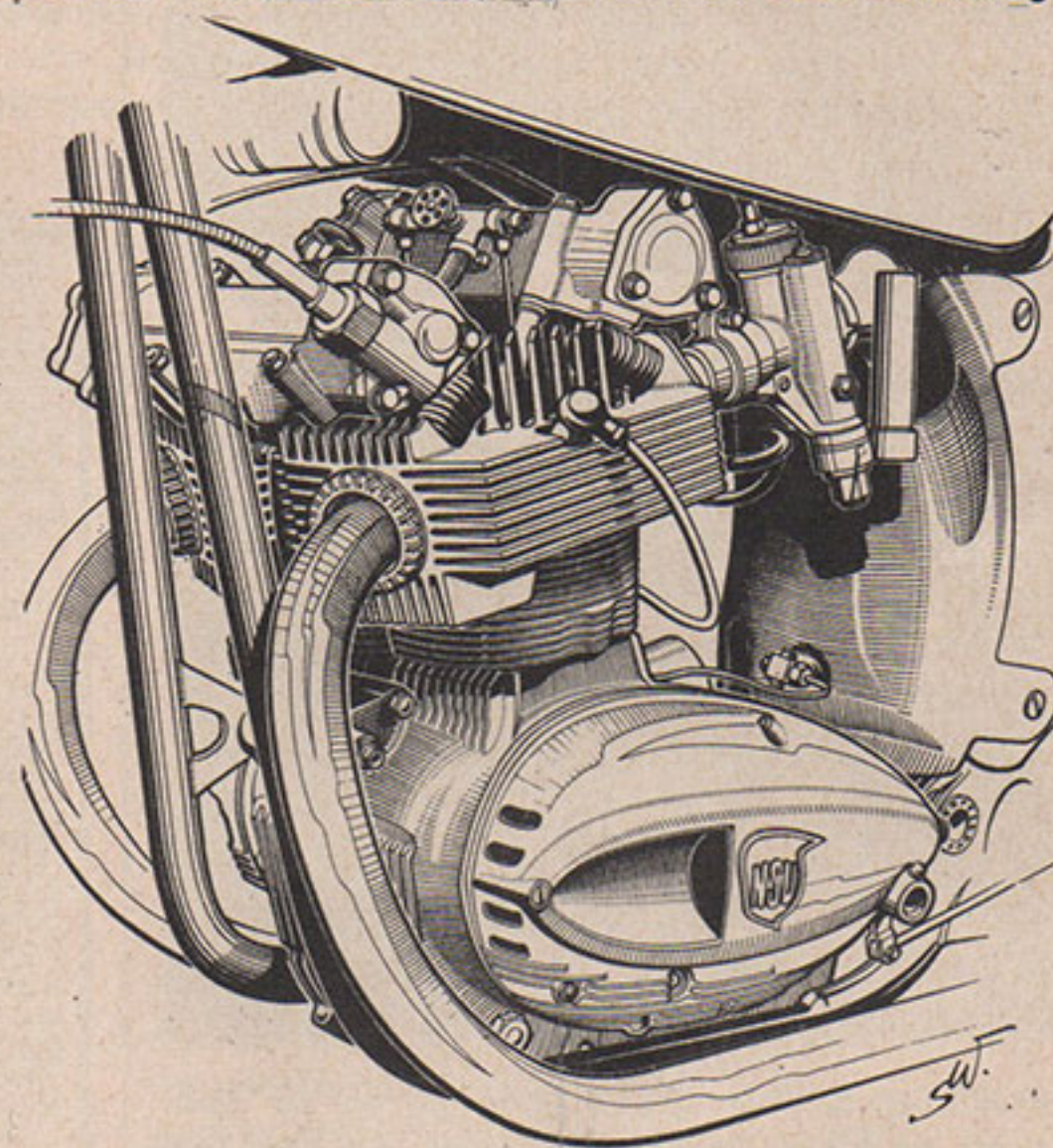
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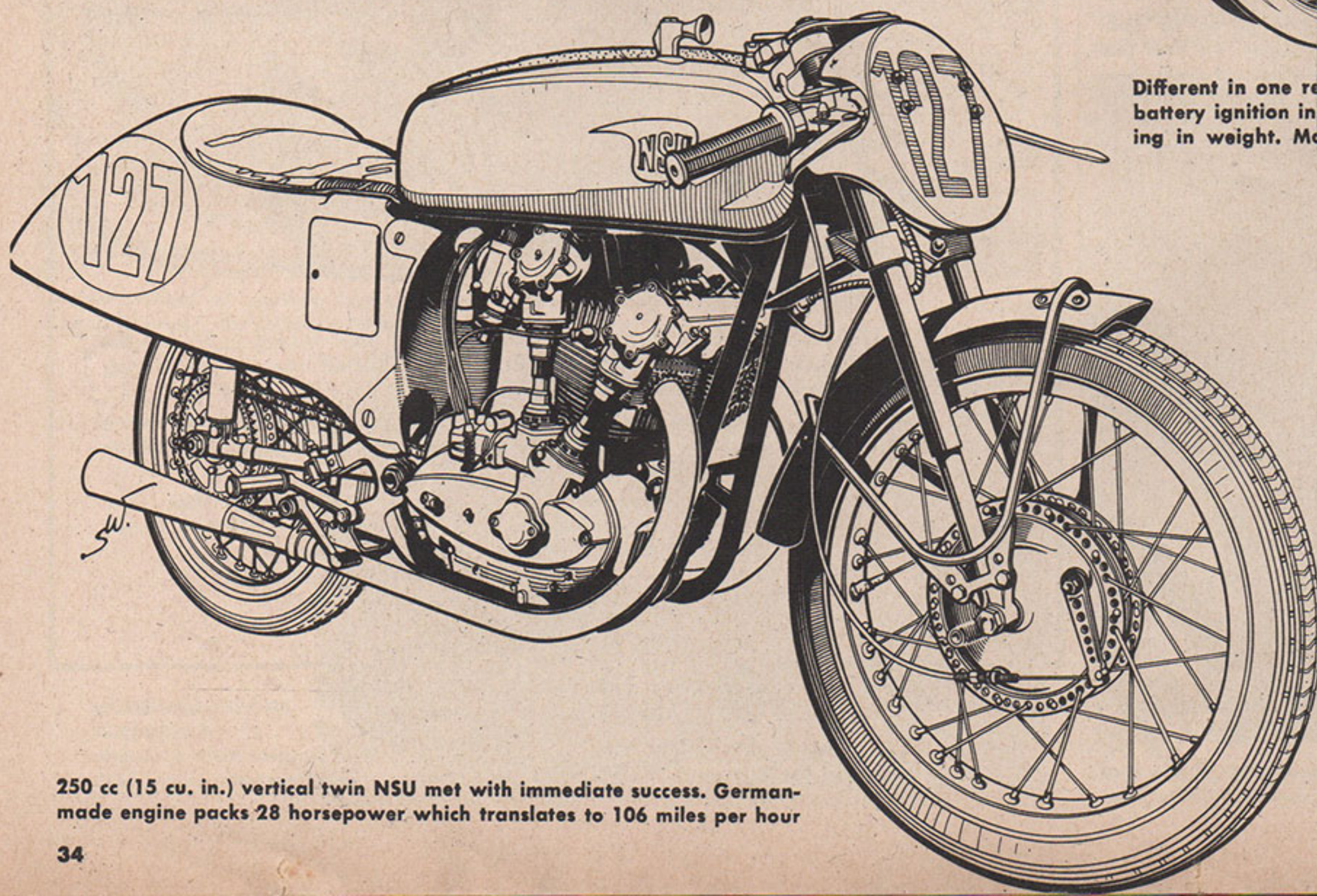
The Earles fork adapted to MV Agusta, is said to improve machine's handling by fact that it does not change wheelbase of cycle as much as regular telescopic when compressed, also reduces unsprung weight



Rather pleasing in a grotesque sort of way is deep belly-tanked Puch 125. Notches fit rider's arms and legs when in a crouch. Here again, latest aft construction. Rear wheel cowling has numerous advantages



Different in one respect, the 250 NSU racer has battery ignition instead of mag, claiming a saving in weight. Model has dual overhead cams



250 cc (15 cu. in.) vertical twin NSU met with immediate success. German-made engine packs 28 horsepower which translates to 106 miles per hour

German Grand Prix

continued

Kluge on one of the latest three-cylinder two-cycle DKWs, which was just a dream on a drawing board last Christmas. While the three-barrel job lacked enough urge to tag the fleeting Norton singles, anyone listening to the sound of the new 12,000 rpm DKW must have nothing but respect. Credit must also be given to new super-speed Bosch racing magnetoes equipped on these machines.

The following account of the sidecar event is by Bill Onslow who, as usual, acted as ballast for Jacques Drion.

"Twenty outfits from eight nations lined up for the 72 mile sidecar race. Drion and myself lay second in the rank. The minutes ticked away until finally we were given the 30 second warning. We adjusted our goggles and pulled back on compression and in an instant were scooting away. What a thrill! Half a mile had gone past and then there was a terrific roar as we laid into a left-hander. Oliver had just screamed past us with a Gilera hot on his tail. Try as we did, we were unable to hold off yet another challenge from a second works Norton, so we tucked in behind him and became his unwilling tow. At half distance came a sharp left, then a right and we fell out of his draft, spinning completely around. Recovering our composure and forward momentum we continued to bang away with the leaders still in sight, but hopelessly out of our reach. Finishing the first lap in fourth spot, we caught a fleeting glimpse of a Gilera upturned in one of the straw bales. Our next pit signal gave the answer. Milani had crashed and we were now running third.

"Meanwhile, Oliver had been pulling away steadily lap by lap until he was a good 38 seconds ahead of the next man. With victory in his grasp, fate hit the champion hard. The bracket carrying the third wheel fractured at its base and though he tried to continue with a wheel that would not turn, Eric was forced to give up. In the end, Cyril Smith's Norton was forced past the four-cylinder Gilera and Drion and I had scooped up third spot and nine points toward our international score, feeling rather pleased with the per-

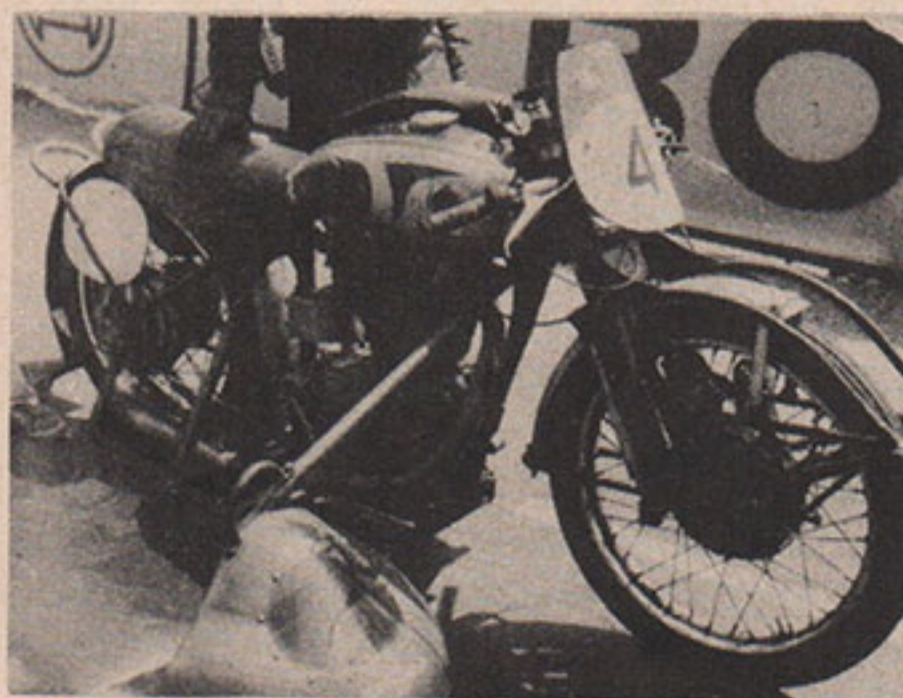
formance of our standard 'Featherbed' Norton."

Only six seconds blanketed the first three winning bikes, all Nortons, as they made a clean sweep in the 500 cc solo showing. All three Ajays had fallen by the wayside. Italy's four-cylinder Gileras and MVs were observed to have somewhat the same troubles they had in the sidecar event: plenty of straightaway speed but apparently lacking in maneuverability or speed of shifting when running over such a twisting course. Thus with the finishing of the German Grand Prix and the points that it brought, the following riders topped the World Championship classifications as of this date:

125 cc Class	Sandford
250 cc Class	Anderson
350 cc Class	Duke
500 cc Class	Armstrong
Sidecar Class	Smith

Basing their traffic technique on Indianapolis experience, German Highway Police regulated the departure of the half million people from a low flying airplane, an experiment which made it possible to be away from the track in 20 to 30 minutes instead of the previous two to four hours of other years.

With the closing of this viciously contested race, only two other main events remained in the series, one being in Milan and the other at Barcelona. Who will the final World Champions be?



The Vervrogen brothers arrived with a real surprise package, the Belgian FN, which features an older, unusual and complicated swinging arm type of front suspension with heavy rubber bands acting as counter-recoil snubbers



One can see that the latest "Featherbed" Norton single is very much in demand as they lead the pack, along with a band of Ajays, through an early bend in the 500 class of the International GP

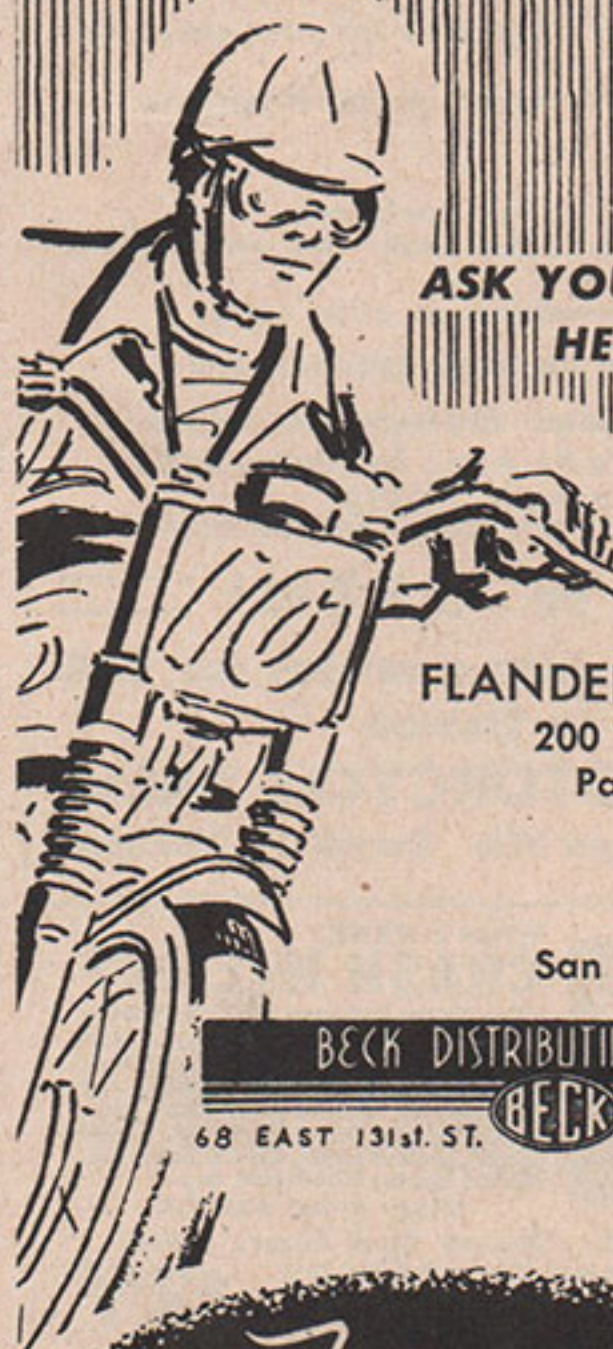
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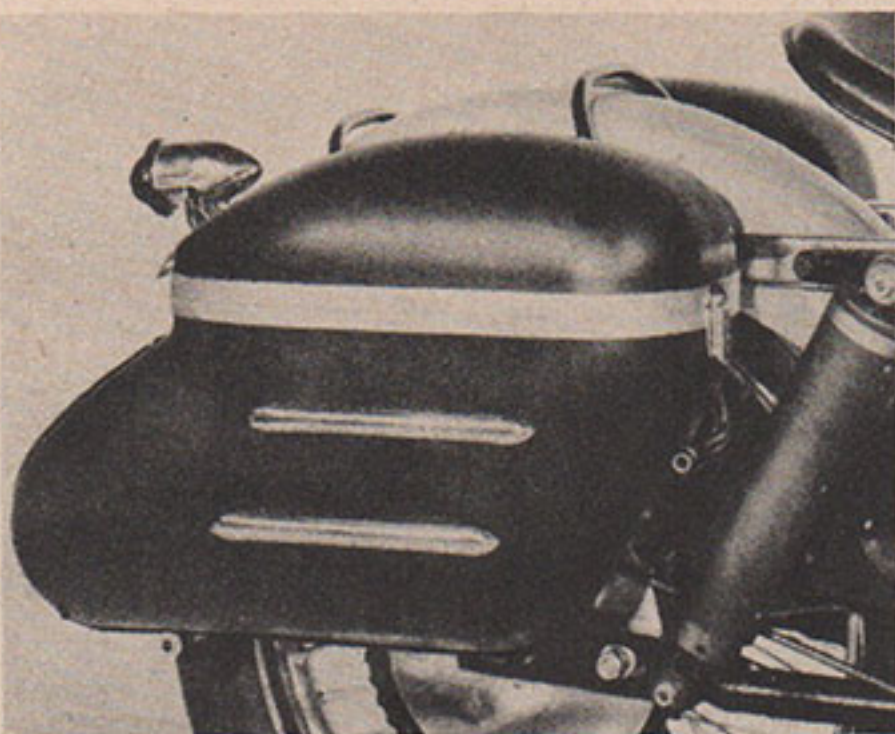
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1953 HARLEY continued



New trend in saddle bags. Flexible "Royalite" plastic retains its shape, is waterproof and provides increased capacity. Horsehide covered, air-foam rubber buddy seat is available for the K

last year's K are claimed to be overcome with a faster acting throttle and less lost motion by an entirely new designed spiral cam in the throttle grip. Spiral lead is increased 50 percent and faster action results. A contact take-up spring has been incorporated to take up back-lash. The grip is now removable by an aluminum button-headed retaining screw in the ends of the bars.

The deluxe accessory group offered on the K last season has been retained at no increase in price. The model is now available, however, with a different finish in a number of places and with a somewhat reduced number of accessories. For example, the standard solo group carries rigid bars in black, headlight in black with chrome bezel, muffler in black, handlebar clamp cover and instrument cover in stainless steel, steering damper adjusting knob and front and rear brake-side covers in brush finish. The tail lamp cover, fork panels and fork tube covers will be enameled in the 1953 standard color specified. Accessories that go with the standard solo group include air cleaner, jiffy stand, front safety guard in black, chrome exhaust, cadmium-plated rims, cadmium fork sliders and horn and cover. The K as described above with the standard solo combination will only be available in the four standard, no extra charge, colors.

The price is reduced \$44.75 over the deluxe combination, enabling the K to be usually sold under \$1000 delivered.

Striking new saddle bags and a lush buddy seat are on the way. The revolutionary bags are of Royalite plastic that holds its shape, is waterproof and flexible enough to bend under pressure. Covers are removable for access and can be key-locked. The bags are light in weight, have large capacity and are attached to a chrome carrier affixed to top of fender.

The buddy seat fastens rigidly to the bike, has no-sag springs, 1 1/2 inches of foam rubber, covered by top grade horsehide leather and fitted with a passenger hand rail. Folding foot rests are included.

61 Model Discontinued

With increased demand for the larger 74 OHV model, the 61 has been dropped completely. For those who still prefer the

characteristics of this model, a special version of the 74 is available with what is termed the "traffic combination" incorporating a special cam and a 1 1/8 inch venturi carburetor to insure excellent acceleration and low speed performance. Both the regular 74 and the "traffic combination" 74 are offered with foot shift or hand shift optional. The big engine has been further refined by moving the hydraulic valve lifters (the only motorcycle in the world incorporating this feature) to the bottom of the push rods so that more oil will be available in the lifter chamber with even less probability of malfunction.

Excess oil from the overhead covers, instead of draining into the scraper pocket, is now directed to the cylinder walls just below the piston skirt when in top position. Added lubrication is given to the piston and cylinder walls. The lower oil scraper ring is now made of heat-treated steel that is flexible and fully conformable with better oil control and a more even metering of oil to the top rings. Guided, ball-end check and relief valves with three-cornered shanks have been installed in the pump to provide more positive regulation of the oil pressure. They replace the ball type check and relief valves formerly used. A removable screen, easily accessible, has been placed in valve lifter oil line, screening foreign material.

During the later part of 1952, rotating exhaust valves were introduced in the OHV models, and will feature the 74 OHV engine for 1953. These valves are free to rotate in open position and there is less possibility of valve head warping and burning. Engines will give a longer period of servicing without valve reseating.

An appearance change in the 74 OHV is visible in the gear case cover that features four ribs, each quite a little longer than formerly. There is also quite a change in the appearance of the speedometer. The numerals on the dial face read, 1, 2, 3, etc. instead of 10, 20, 30, etc., and the calibrations for the intermediate distances are also incorporated right on this same dial face. Large numerals, yellow-silver letters on black background are easily read.

As formerly, two accessory groups are offered on the 74 OHV. The standard solo group is the same as last season's utility solo group. The deluxe solo group features something new—the oil filter assembly.

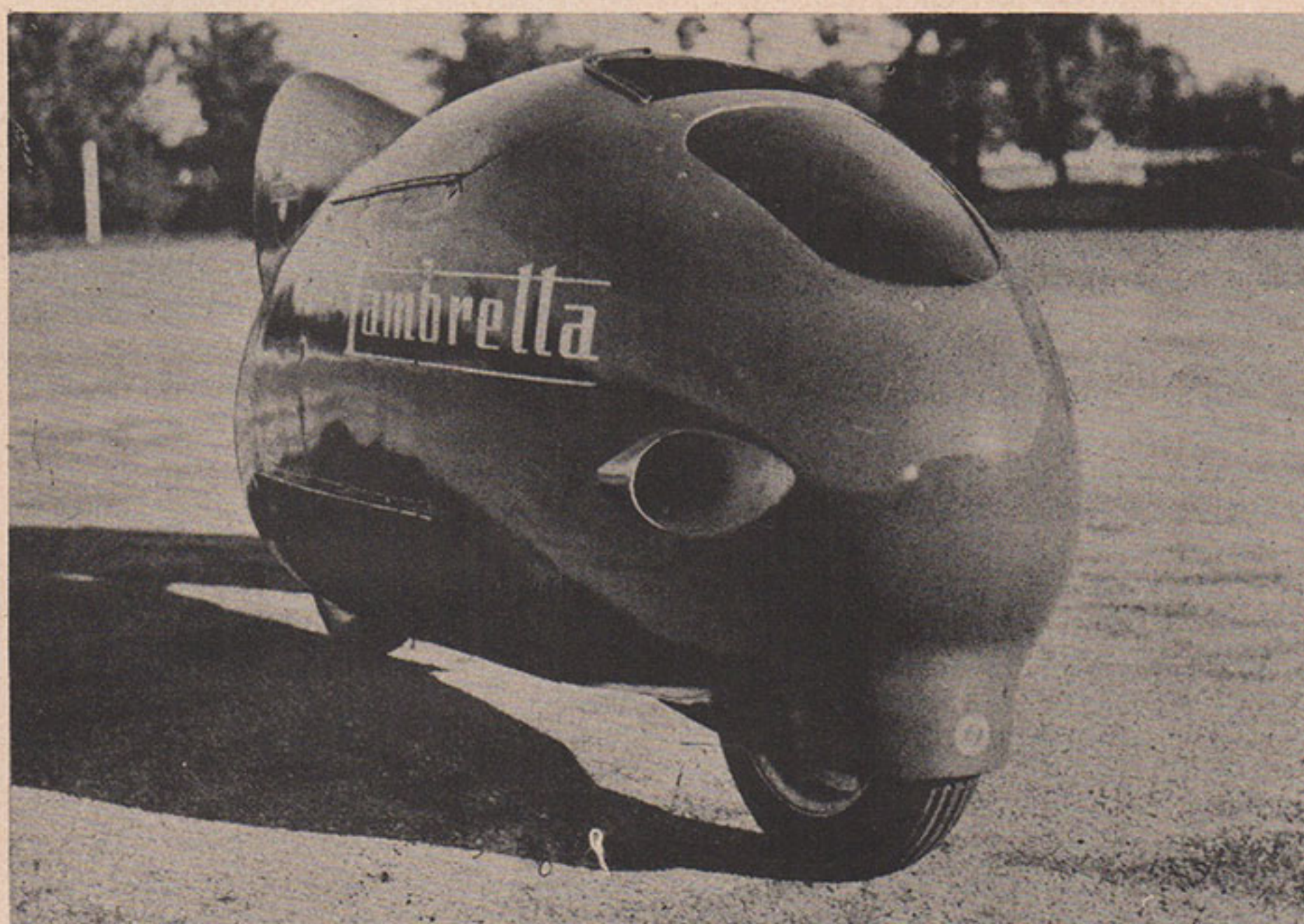
Color Glamour for 1953

Color options for 1953 are outstanding. On the 165 there are three, no-charge options: pepper red, glacier blue, forest green and at an extra charge, glamour green. On all other models there are four, no-charge options: brilliant black plus the three no-charge colors on the 165. Silver for police use only is also available at no extra charge. Three colors at an extra charge are obtainable: glamour green on the 165, plus cavalier brown and white.

The new forest green is greener than last year's tropical green; pepper red is a light red; glacier blue is darker than the former rio; cavalier brown is metallic and verges on the mahogany; glamour green is a metallic color of a green-gold shade.

WORLD RECORD HOLDER

125 LAMBRETTA . . .



We find it almost inconceivable that a $7\frac{1}{2}$ cubic inch displacement engine (not supercharged) could whisk a human along at 125 mph, but it's "in the book" along with seven other international Lambretta records. This, along with "the Brute" which just hit 168 at Bonneville, will be shown

. . . TO BE AT MOTORAMA

AN INCREDIBLE PIECE of precision machinery, the Lambretta motocycle, which holds seven world speed records, will be featured in the third annual International MOTORAMA in Los Angeles in November.

This huge exposition will be held in the Pan Pacific Auditorium November 10 through November 16 and will present the nation's largest display of motorcycles and related products.

The Lambretta will be unveiled for its first American showing at MOTORAMA. This extraordinary little machine with a 2.042 in. bore, a 2.278 in. stroke and a 7.51 cu. in. capacity attained a top speed of 125.44 mph for the flying mile. This is regarded as one of the most exceptional speed achievements in any field of all time.

The Lambretta will be shown through the courtesy of the factory in Milan, Italy and the Lambretta Sales Company of Los Angeles. It features an enclosed streamlined body, giving it the appearance of motion even when it is standing still.

In addition to the Lambretta, there will be a complete exhibit of foreign and American make motorcycles, as well as a large display of parts and accessories. Riders from all parts of the west have indicated their intention of attending the exposition.

MOTORAMA also will feature a vast presentation of rare and unusual automobiles in all categories. Packard's fabulous

new sports car, the Pan American, will occupy the center show space in an exclusive West Coast showing.

Competition machines, many of them fresh from championship time trials on the Bonneville salt flats, will be exhibited.

For information on commercial display space or house exhibits, please write to MOTORAMA, Inc., 5959 Hollywood Boulevard, Los Angeles 28, California.

FLASH!

Motorcycle Hits 168 MPH; Hot Rod Travels 203 MPH

WENDOVER, Utah, Aug. 26 (P)—Louis Castro of South Gate, Cal., unofficially broke an international record for conventional motorcycles on the Bonneville Salt Flats near here today with a speed of 168.77 m.p.h.

Castro, straddling The Brute, a custom cycle owned by Bud Hood and C. B. Clausen of South Gate, whipped over a two-mile course to shatter unofficially the mark of 150.313 m.p.h. set in 1950 by Roland Free on the same flats.

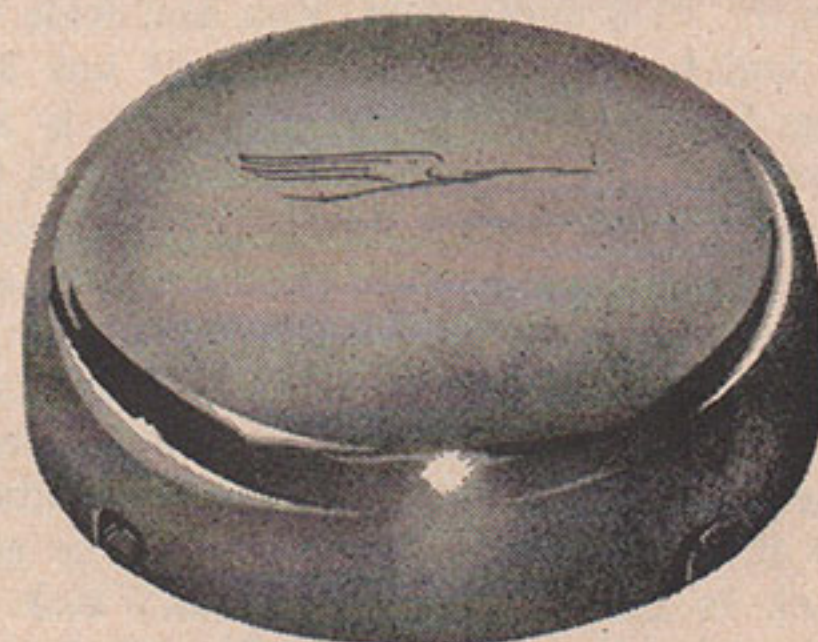
Thomas Beatty of Glendale,

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HE DARED TO BE LIKE OTHER GUYS

By Viola Carruth

JACK SPENCER WAS trying hard for first place in the motor scooter field meet in his home town, Amarillo, Texas. There was only one game left to play, but he was lagging behind on points.

"I still have a chance," he said confidently. "I'll make it in 'Run and Ride.'"

And he might have won, had not his peg leg fouled him up; for Jack is an amputee. The object of the game was to ride to a line, stop, run to a designated point, and back, kick-off the machine, turn it and ride back to the starting line.

Jack was the first to the line on his 125 cc Harley-Davidson, but in running, lost the shoe off his artificial foot. He didn't let it slow his running, but when he got back to his machine, he couldn't kick it off with his unshod foot. He tried and tried, but it was no go. Tears came into the eyes of the spectators when the others rode off and left him. He just grinned and went back to pick up his shoe.

That took courage and stamina—the same courage and stamina he has shown since he lost his leg eleven years ago. It is all because he knew a girl who was an amputee and decided he too could get through this world with just one leg. Not only has he gotten by, but he dared to be like "the other guys" even after a second accident, which, his doctor said, would make him an invalid the rest of his life.

He was 10 years old when it happened on a farm near Ockmulge, Oklahoma, on June 28, 1941. He was riding the back of a tractor—full of that effervescent vitality so individual to children. Then it happened and no one knew just how. Jack's right leg was pinned between the tire and the fender of the tractor.

Out in the Texas Panhandle and southwestern Oklahoma a lot of boys work on ranches during vacations. Jack, ignoring his peg leg, worked along with the best of them. He learned to ride horses too—even got a job riding them.

Unfortunately his luck didn't hold. He had another mishap—six years and 10 days after his first accident. This time he broke four ribs and both legs—his left leg and the stump of his right—in addition to suffering internal injuries.

Jack was helping with the wheat harvest on July 10, 1947. His job was to ride the combine and watch the belts. The platform gave way with him, throwing him under the whirring combine.

The doctor said, "If he lives, he may never walk again. He'll be an invalid the rest of his life."

There followed eight anguished weeks flat on his back in the hospital. Then he was sent home supposedly to spend the rest of his life as an invalid. But Jack couldn't take that. After all, he had been "one of the guys." He would be again.

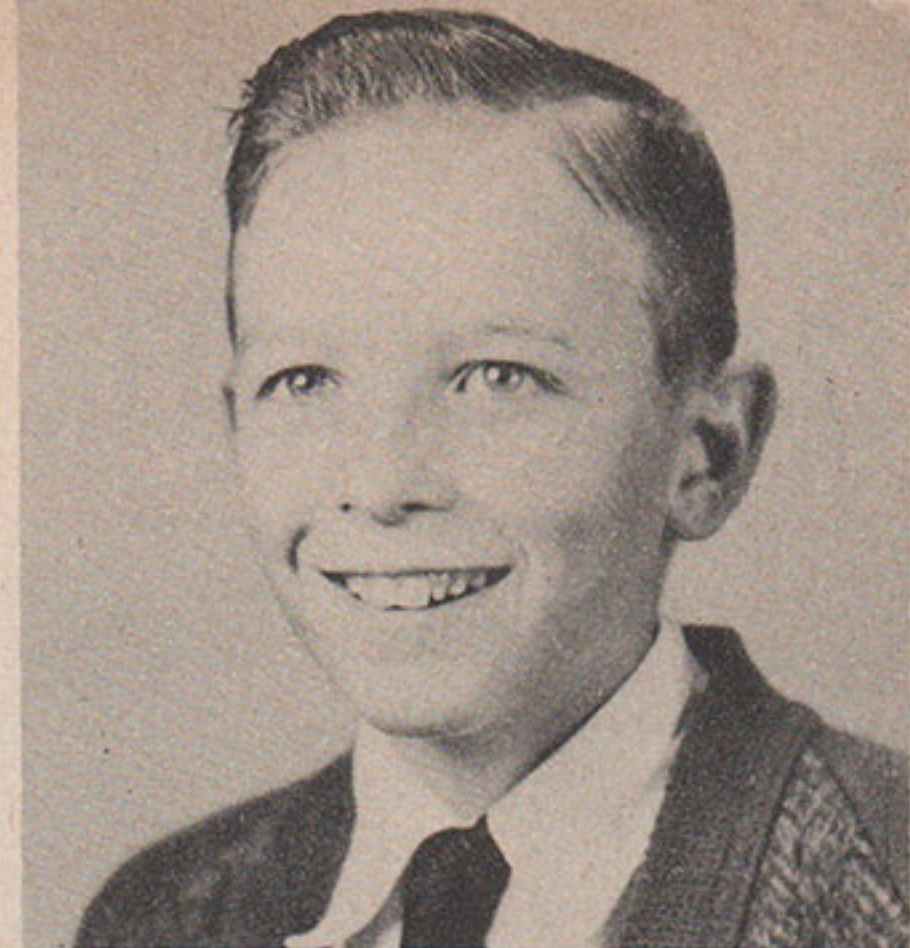
Painfully, with endless failures, he tried to disprove the doctor's verdict and finally succeeded. Eight months later he bought a Cushman Motor scooter. J. R. Horne, Amarillo Cushman Motor Scooter dealer, became interested in him and helped him get a job using a three-wheel motor scooter to deliver packages for a man.

Exuberant with his second victory and exhilarated by the wind in his face, Jack craved speed. His nickname became "Digger," because he would "dig" with anything from a motorcycle to a Mack truck. Consequently his job didn't last long. His employer couldn't stand the wear and tear on his machine.

Horne took him in hand and put him to work in his motor scooter shop. There Jack gained an appreciation of motors and discovered he had an aptitude for just such work. Soon he was working toward becoming a qualified mechanic. He was an industrious and skillful worker, always trying to learn something new, or working out better ways to do things.

He joined the Amarillo Motor Scooter club which had its own dirt track on the edge of town. This really appealed to Jack's love of speed, but he found it was a lot different from "digging" on the streets. One turn around the track convinced him that this took skill and that his missing right leg was definitely a handicap. He would have to use his artificial leg to brake and pivot around the curves. Hours of practice and spills galore went into mastering the feat. But when he did he looked and rode just like the "other guys," his artificial leg bowing out when he threw his weight on it in the curves.

The club was preparing for the second annual Tri-State (Arkansas, Louisiana and Texas) Motor Scooter Field Meet, sponsored by the Cavalier Motor Scooter club in Shreveport, La. Flat track racing on the



Jack Spencer traded his crutches for a motorcycle. He was going to be "one of the guys"

one-fifth mile midget auto race track at the Louisiana State Fair Grounds was on the program, so Jack stripped a 125 cc Harley-Davidson, "souped it up," and geared it down for a racing machine.

When the August, 1949, date rolled around, Jack and other members of the Amarillo club swept into Louisiana like a dust storm with a trailer of racing machines and pit men. It wasn't all front either, as the West Texans took two trophies, five seconds and two third places in the finals. Asking no quarter and giving none, because he needed none, his competition soon found out, Jack was responsible for four of the second places and a third, taking second place on the 125 cc flat track and the others in the field meet.

At a return meet in Amarillo, he really had "smoke" on the boys, taking first place trophy in the flat track racing. This was the same meet where losing his shoe in "Run and Ride" cost him the field meet trophy, but even so he tied for third place in the meet.

About this time he joined the Amarillo Motorcycle club. Riding a Harley-Davidson 45 in 1951 he took first place at a TT race in Big Springs, Texas, and the following day took a third and fifth place on a TT course in Roswell, New Mexico.

He enjoys life as much as the next guy—maybe more, for he's always laughing and talking. Everyone in his home town knows him, and he is one of the people they talk about in Amarillo each time "Employ - the - Physically - Handicapped Week" rolls around.

The greatest thing about him is his apparent total lack of sensitivity in regard to his missing limb, and the artificial stepson.

"This is my fourth leg. I've already outgrown three others," he says as casually as anyone else would mention jeans he had outgrown.

His philosophy is, "Of course, it'd be nice to have 'em both—but what the heck. There's no use worrying about it. There's nothing I can do, except make the best of what I have"; and that he proceeds to do in grand fashion.

His challenge has been to be "like the other guys," who in turn have been awed and inspired by him. His friends call him "Peg Leg," and he loves it.

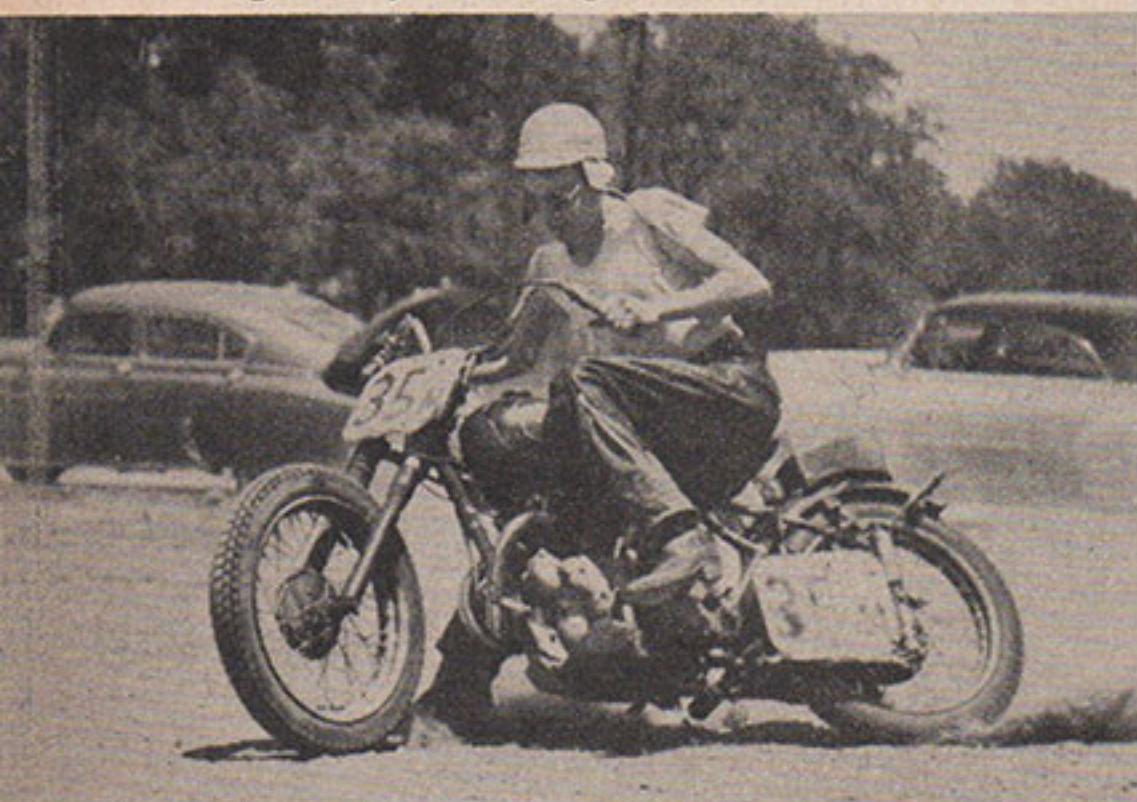
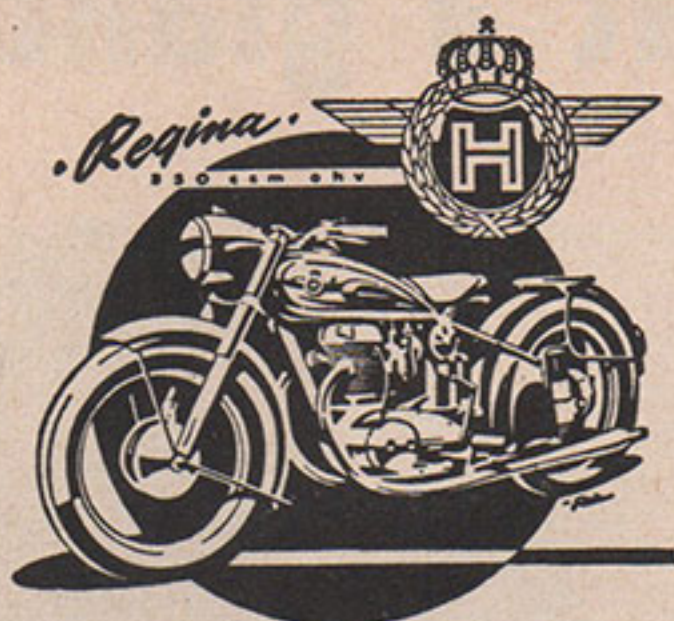


Photo by L. Williams

The doctor said, "If he lives he may never walk again. He'll be an invalid the rest of his life."

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WISCONSIN**CHAMP ENDURO**

By Bill Weber

DON'T EVER GET into a serious stump-jumping contest with Bob Gould of Chicago, for he has just plowed under the Fifth Annual Minocqua Run which had the honor of being the Wisconsin State Championship for the first time this year. Actually it was Gould's fourth consecutive win when he rammed his 30.50 cubic inch Triumph Trophy model over the 225 mile trail for a score of 935.

The closest competition came from Jim Dunn of Lansing, Michigan who scored 890 points with his Matchless single. Following these two came Dennis Quade, Wausau, Wisconsin, Triumph; Gardner Durfee, Detroit, Michigan, Matchless; Claude Goulding, Saginaw, Michigan, K Harley; Bert Commings, Bob Becker and Ray Moore. Murdock of Wausau took the 125 class with a Harley-Davidson.



Champ Bob Gould herds Trophy up Squirrel Hill



Bob Becker gets helping hand with his Harley 45

The course led into the woods within a mile of the start. Old logging trails and deer trails were predominant. Two-way radio communication was at each of the 18 checks, courtesy of the Wisconsin Valley Radio Club. This was a great help in finding lost or stalled riders. Missing riders were pinned down between two checks via radio. A system was in use whereby every rider was given a pickup slip with his name and number on it. In case of trouble he merely stopped the next rider to pass and gave him his slip. This rider deposited the slip with the next checker who relayed via radio to the master check. A pickup truck was then sent out to rescue the rider and machine.

One of the roughest parts of the course, believe it or not, was a four mile straight of blacktop road. This road, condemned for public use, was an old corduroy section with blacktop covering. The logs had heaved up, forming ridges the full width of the road about 18 to 24 inches apart, some of them 12 inches high. Try that for four miles sometime.

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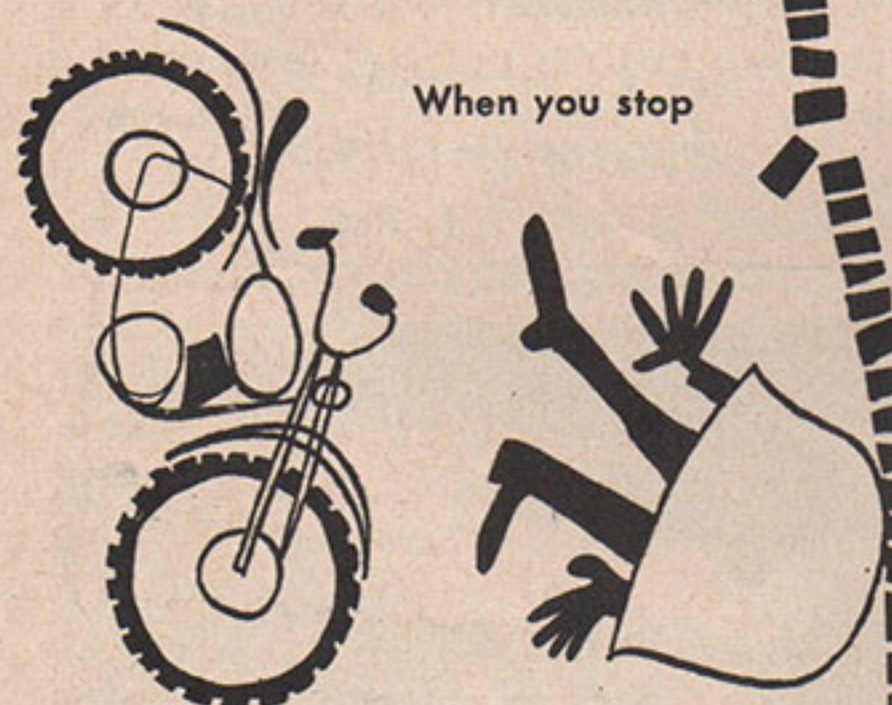
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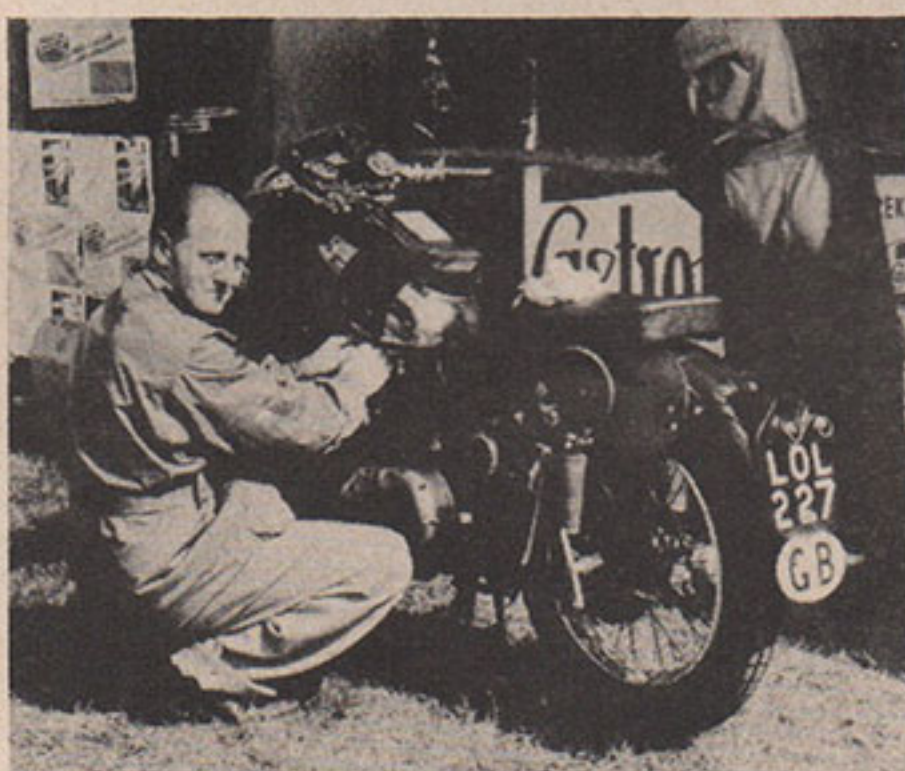
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The WORLD at a glance



"Blast it, I've been torpedoed!" J. Masterman has a little difficulty coaxing his 1923 Norton off the mark in the stop and restart test of the Land's End Trial as spectators disappear in a cloud of smoke



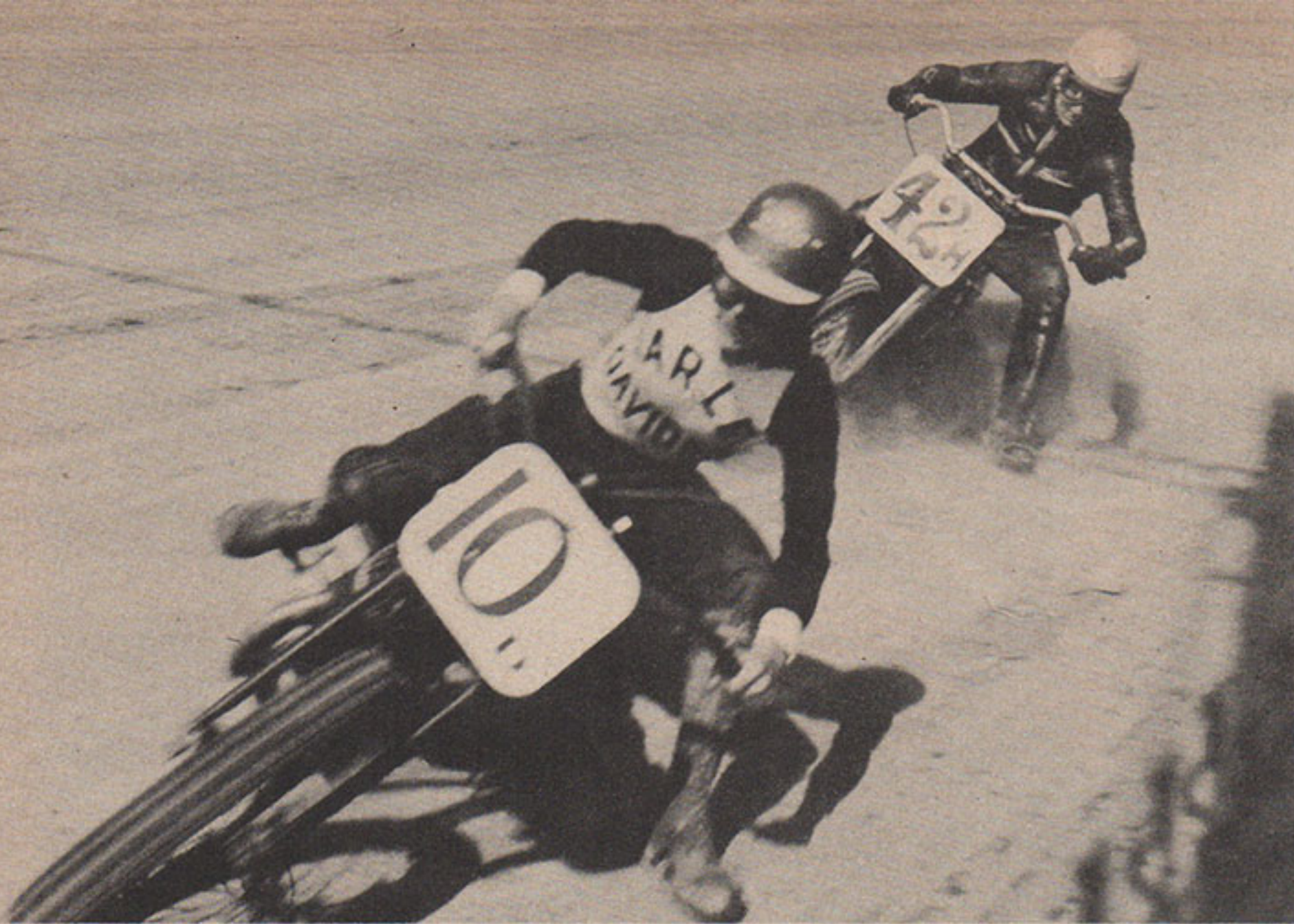
Captain Fred Rist of the successful British Trophy Team is a master of machine preparation. Fred is shown checking out his 40 cu. in. BSA prior to the start of the International Six Days Trial



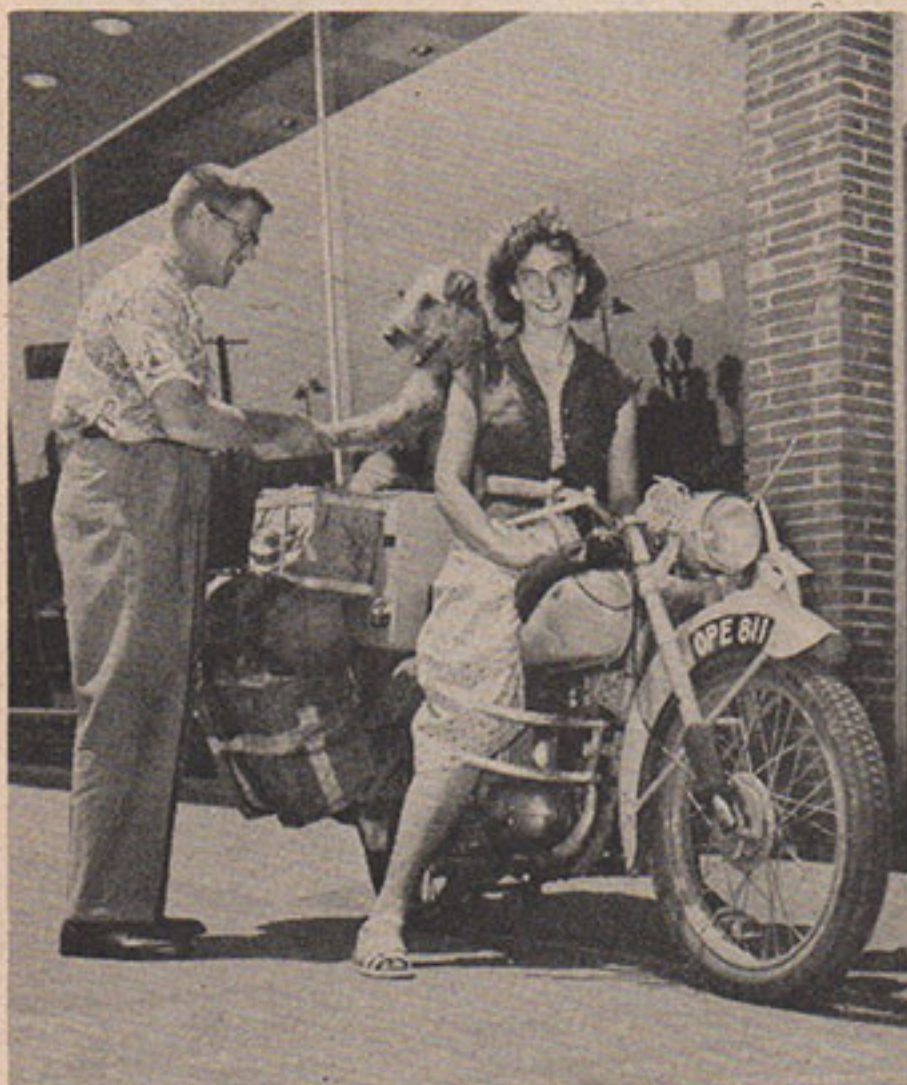
Easily made plywood bedroll carrier for motorcycle bolts to rear stand. Ends of bedroll rest on carrier, do not take up space needed elsewhere



Max Colville breaks the pull of gravity as his Harley 45 climber rips up good black Indiana dirt. The V twins are still king of the hill



Daytona Police Benefit thrillers. Number 42H, Dick Braise, expert from Fort Wayne, is about to pull a quickie on Morris Rierson of Huntington, West Virginia, in the hard-fought expert elimination heat



Put 'er there, pal. Peggy Thomas's airedale is an interesting character, and no wonder. His dog house has been perched on the back of a world-circling BSA Bantam for the last two years

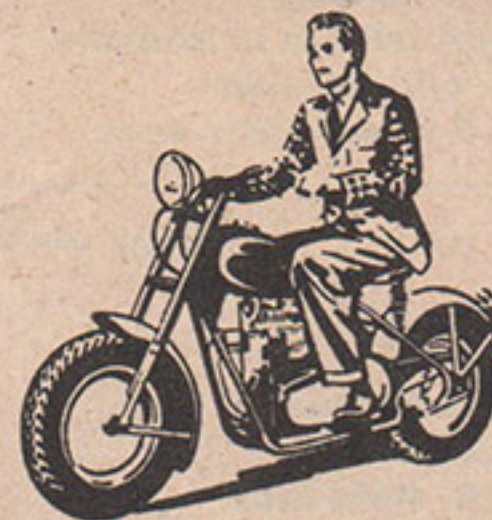


The late Ernie Roccio carried American colors high, received final applause from grandstand of an English short-track. This shot, taken in 1949, shows Ernie on a Moto-Guzzi at Del Mar



Birmingham, Britain's second largest city and one of the first to use two-way radio control on mobile police patrols, has chosen the famous BSA Golden Flash, 40 cu. in. vertical twin to help keep order. Note that British motor patrols, unlike Americans, wear crash helmets, goggles

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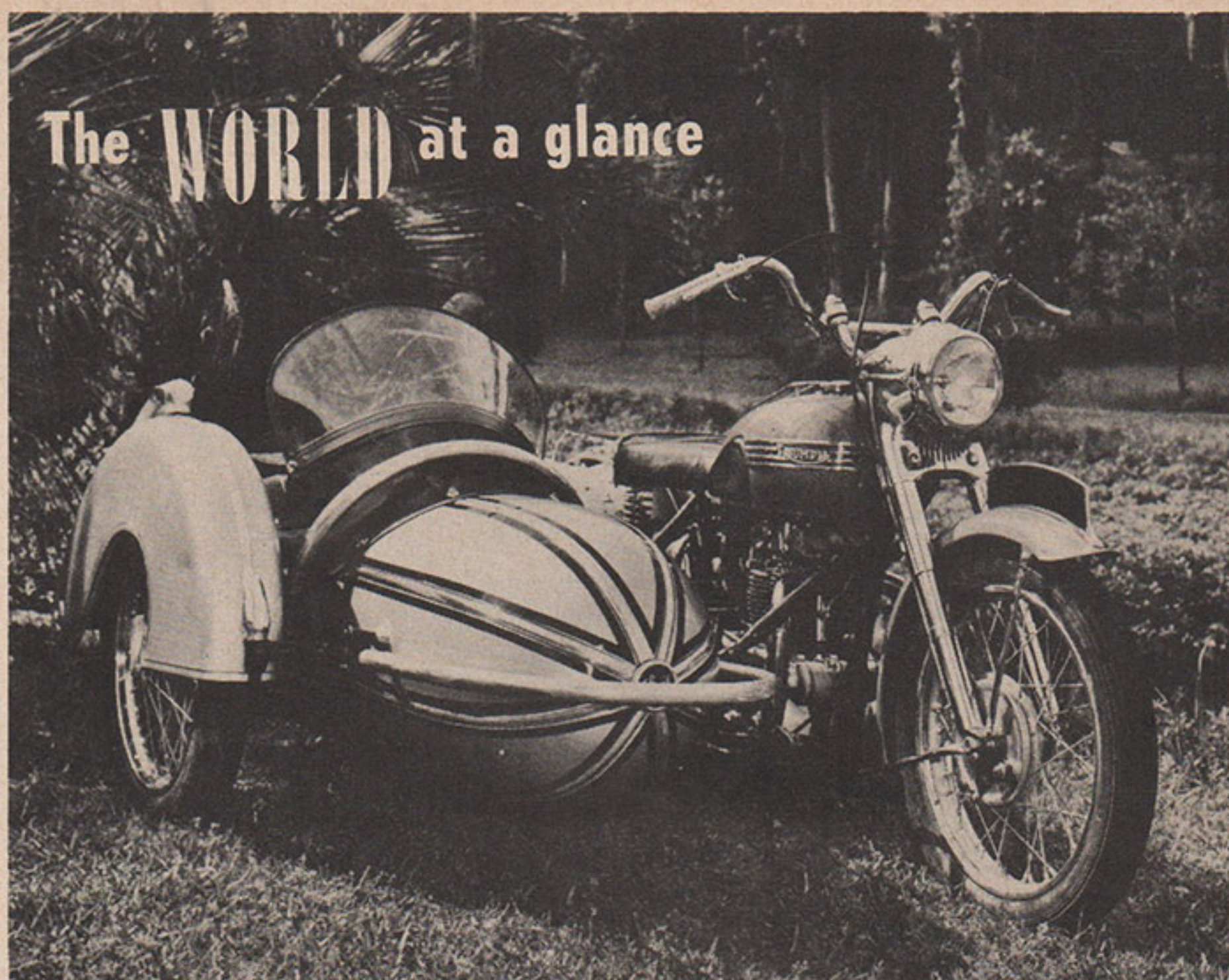
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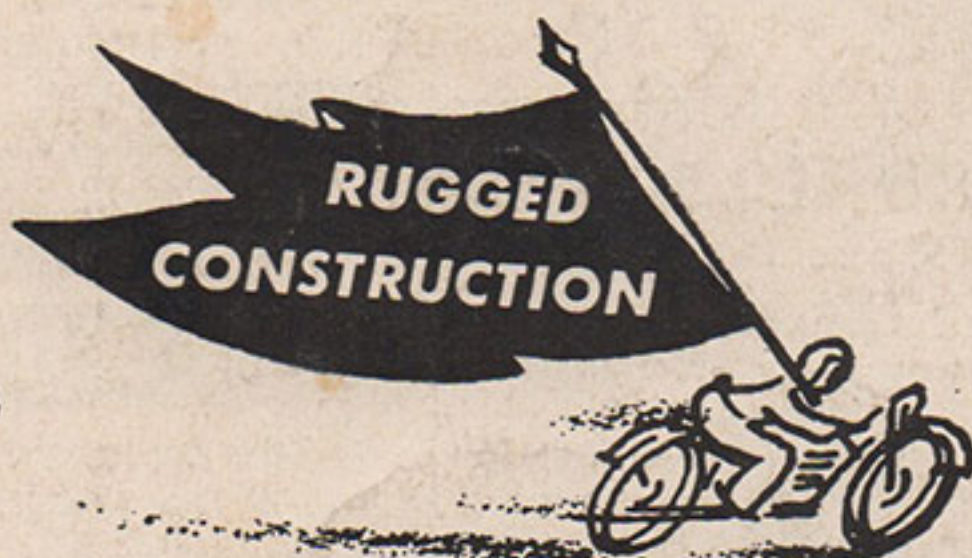
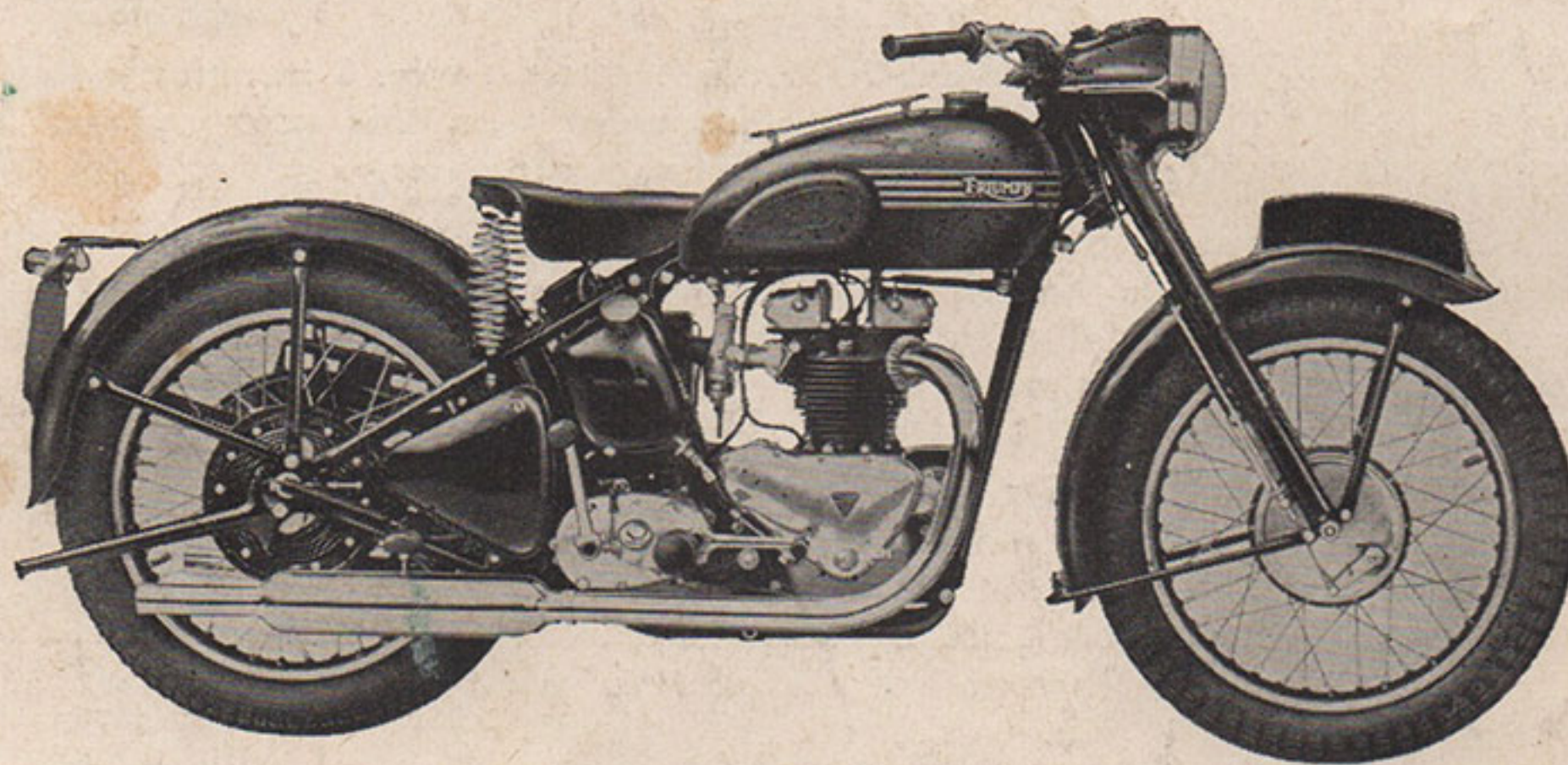
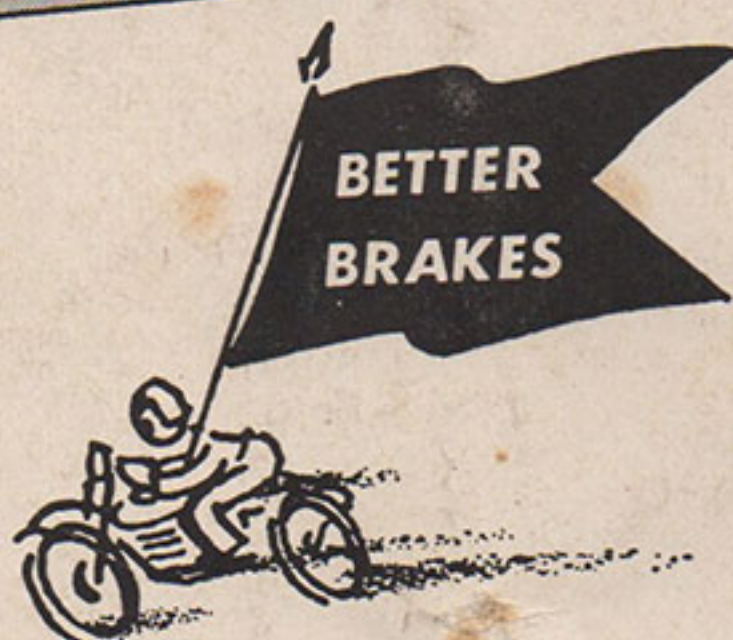
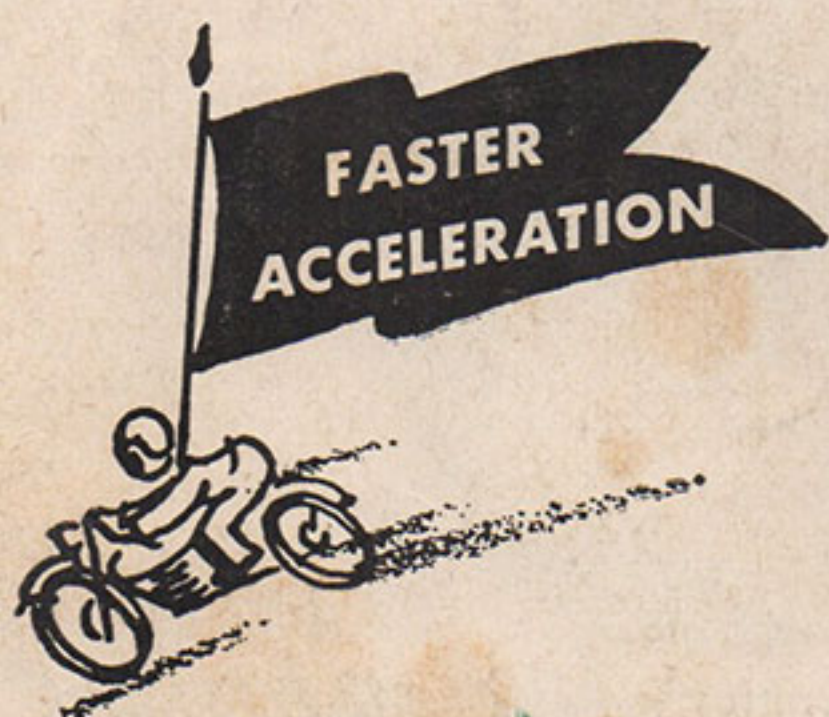
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