

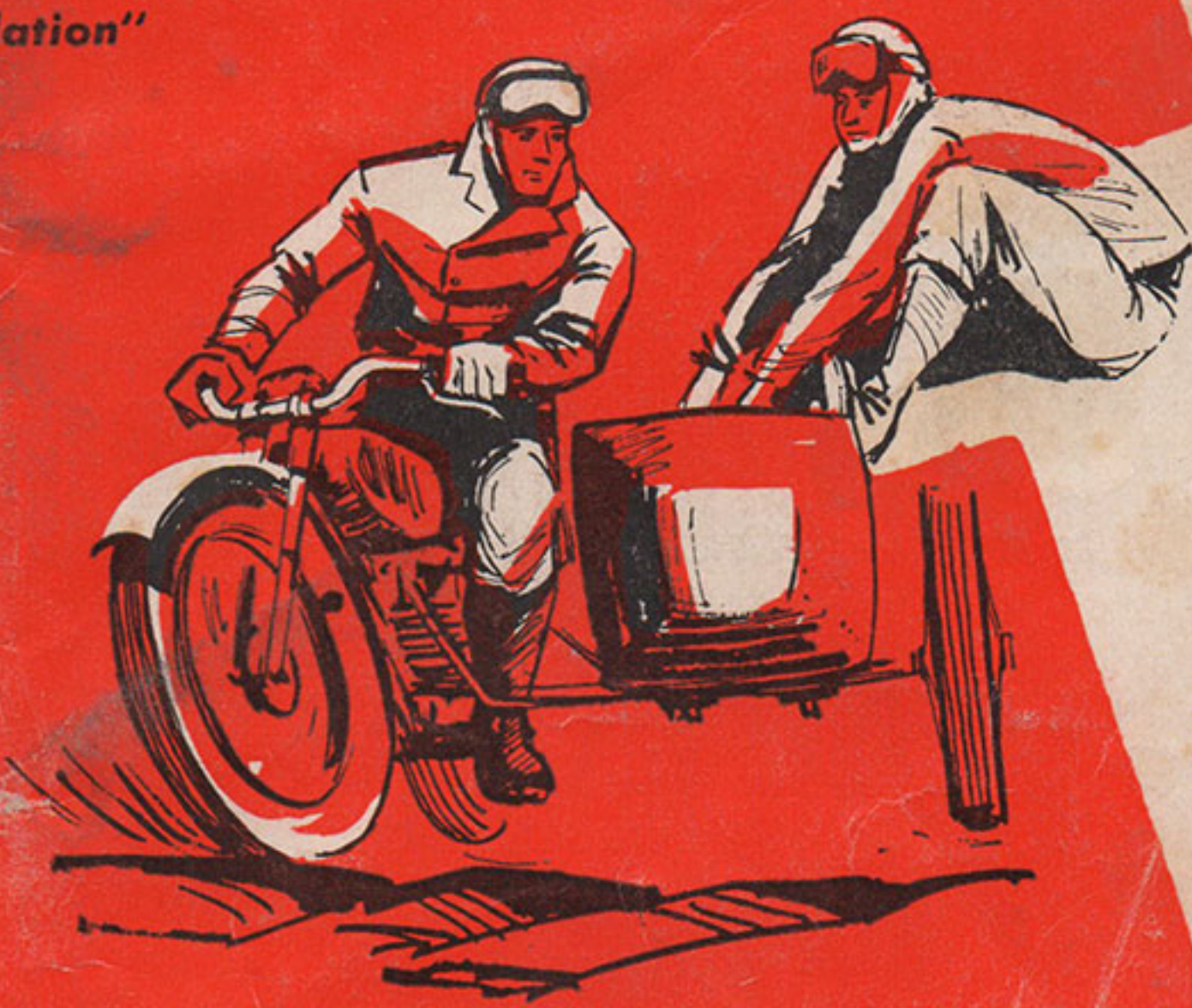
Toughest Race Against Time? page 14

CYCLE

**4000 MILE
ROAD TEST**

DECEMBER 1952 35c

"World's Largest Monthly Motorcycle Circulation"



**International
Six Days Trial**

page 10



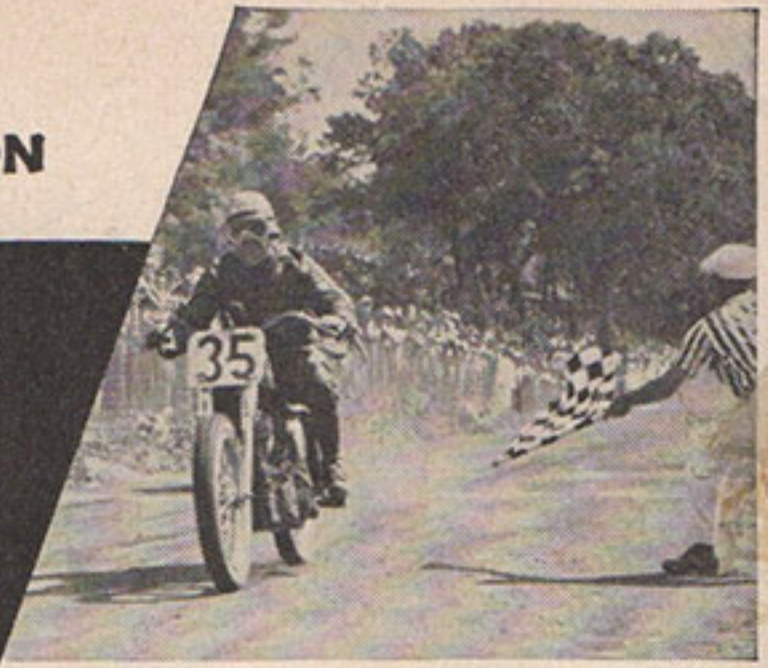
John Doe

The Yanks are Coming—Americans Race Abroad



Miller (35) leads into first turn in 45" National. Soderstrom (77) finished in second.

BILL MILLER
on a Model K
45" CHAMPION



Miller on his "K" wins 45" Elimination.

14th time Harley-Davidson wins National T.T. Championships

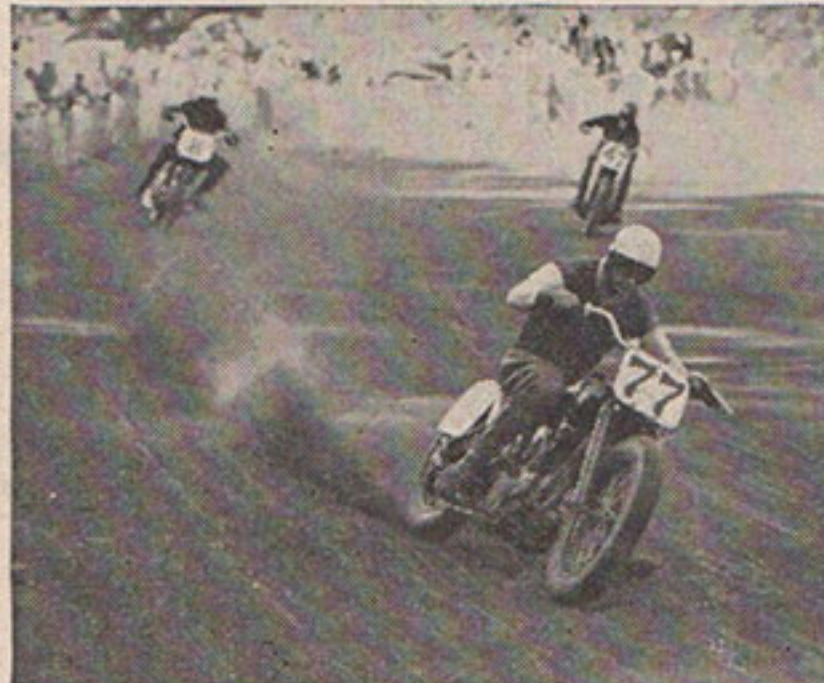
Once again, Harley-Davidson motorcycles have proved their right to the title, *All-American*. In the 1952 National Tourist Trophy Championships, Harley-Davidson riders Bill Miller and Roger Soderstrom virtually dominated the day's races. Each won a qualifying heat and a national championship. In all, a total of six out of the day's ten events were won on Harley-Davidsons. Miller and Soderstrom, on their K models, finished one-two in the 45" National, after each had won a 45" Elimination. Paul Meyers, Harley-Davidson, won the first 80" Qualifying Heat, and Soderstrom, riding his 74 OHV, was runner-up to Jim Phillips in the second heat. Holding the lead all the way, Soderstrom won the 80" National. Lee Christian on a Harley-Davidson won the second 80" Consolation.

There's fun and thrills in every mile you travel with a Harley-Davidson. And you'll be proud to own one of these *national champions* of power, speed, stamina, and comfort! See the complete, sparkling line of 1953 Harley-Davidson models at your nearest dealer. Ride one today.

HARLEY-DAVIDSON MOTOR CO., Milwaukee 1, Wis., U.S.A.

Soderstrom (77) leads in the 80" National.

He roars over the hump on the back stretch.



Miller (35) and Soderstrom, on K models, battle for the 45" Championship.

45" National T.T. Championship

1. Bill MillerHarley-Davidson K
 2. Roger Soderstrom ..Harley-Davidson K
 3. Jimmy Phillips
 4. Harry FeareyHarley-Davidson
- Time 7:40.93

80" National T.T. Championship

1. Roger SoderstromHarley-Davidson
 2. Jimmy Phillips
 3. Paul MeyersHarley-Davidson
 4. Harry FeareyHarley-Davidson
- Time 7:32.74

Soderstrom on his way to the 80" title.



ROGER SODERSTROM
on a 74 OHV
80" CHAMPION



SOUTH AFRICA MOTORCYCLE PARADISE

By J. Bunton

MOTORCYCLE SPORT in South Africa has come a long way since the days when the speed fiends tore down the straightaways at around the forty mile an hour mark, when one year the famous 403 mile road race from Durban to Johannesburg was run in a raging snow-storm. Today, the sport embraces every kind of competition by the clubs that stretch from the Cape in the South through barren desert-like Karoo to the Golden City of Johannesburg and the Capital of the Union of South Africa, Pretoria, over 1,000 miles away to the North.

For the high speed bug there are several through-the-streets of the city events and the fast dirt-surfaced tracks; for the lover of roughery there is the scramble, or moto-cross as they call it in Europe. Scramblers seek out the wildest country possible abounding in watersplashes, deep sand and uneven surface, mark off a track and proceed to tear man and machine apart by the very nature of the terrain.

The "English" type of reliability trial is finding favor among clubmen, and fast, too. Special machines are being imported and riders are mastering the tricky technique of feet up riding over all types of going. This type of competition gives the average man-about-town the opportunity of trying his skill on two wheels for it is inexpensive and the road bike can be used with as much chance of success as its specially constructed counterpart. For the first time in the history of the game a South African rider named Walter Duxbury has been selected to compete in the famous International Six Days Trial that was just run off in Austria.

The small cinder circuit is tops with the fans and packs 'em in by the thousands in Johannesburg. For several years now teams of European speedway aces have sifted the cinders of Springbok circuits. Two years ago we saw a representative team from Holland campaigning on our tracks and what they lacked in skill they made up for in crowd appeal and sheer dash. Riders of the speedways have raced successfully in Britain, Holland, Germany, Norway, Sweden, Finland and even behind the Iron Curtain. A representative team toured Europe last season and the boys made their mark wherever they brought their rip-roaring JAP-powered specials to the starting gate. Slickest rider of the cinders is popular Henry Long, whose feats in the Transvaal and Natal have made his name a household word with the fans. Henry is now riding for Belle Vue in the British First Division and it is learned that he is making the British boys eat his cinders in real fancy style.

Kingpin among the really rapid riders is South African bred Italian ace, Borro Castellani. This boy has everything—experience, dash, nerve, strength, the lot.

His riding is out of the top drawer and his name on the entry list brings the fans into the stadium in droves. There is no greater box office attraction than the dynamic Cas. In the recent Nigel "100"—a 100 miler run on the 2½ mile Jimmy Cuthrie Circuit at Nigel on the Eastern Rand in the Transvaal—Castellani parted company with his new Norton "Featherbed" 500 cc job at over 100 miles per hour and aside from a few days off duty for rest and massage, escaped unhurt.

Rudy Allison is another hot shot in this category and the accompanying shot shows him racing to victory in the Nigel race. Other headliners in the high speed sphere are Laurie Zeeman, Clarrie Hurst, George Anderson, Vic Procter, Ray Travers and Wag Gwillam. Most riders favor mounts from either the Norton or Velocette stable; although Vic Procter chose a Vincent "Black Lightning" for his attempt on the world speed record at present held by NSU (Germany) at around the 180 mph figure. Although pressing along pretty rapidly Procter managed to set the South African mark over the 150 mile an hour level but needed another 30 miles to crack the world jackpot. He will try again.

Talking for a moment of scrambling as a sport it is here that we find the finest club spirit as the boys have not yet become hunters of a fast buck but are prepared to race for the silver trophy and the odd medal. George Corlett is the gent who goes to town in this division and he is always Matchless-mounted. His present motor, a special competition job, boasts a "spring heel" and "Teles" and can certainly motor when he rolls open the grip. Reg Grant has imported a special competition Norton and is beginning to receive the checkered flag way out ahead of the rest of the field but he has some way to go before he overhauls the flying Corlett.

Motors are all alcohol burners in the speed events and most turn out the power in large doses. The controlling body of the sport in the Union places no ban upon the type of fuel used and it is for this reason that the riders run their compressions sky high with a consequent loss of reliability. Machines generally are well prepared and organizers insist on smart turn out of competitors, most of whom ride in one- or two-piece leather suits with top boots and crash hats of approved A.C.U. pattern.

As far as genuine club runs go, riders in this part of the world could learn much from their American cousins. No uniforms are worn and it is very seldom that one comes across a club on a Gypsy tour or such. The average South African motorcyclist uses his machine either for transport purposes or for sport, and when it comes to touring or getting from A to B, especially if the distance be large, he parks his bike and gets out the auto. In a

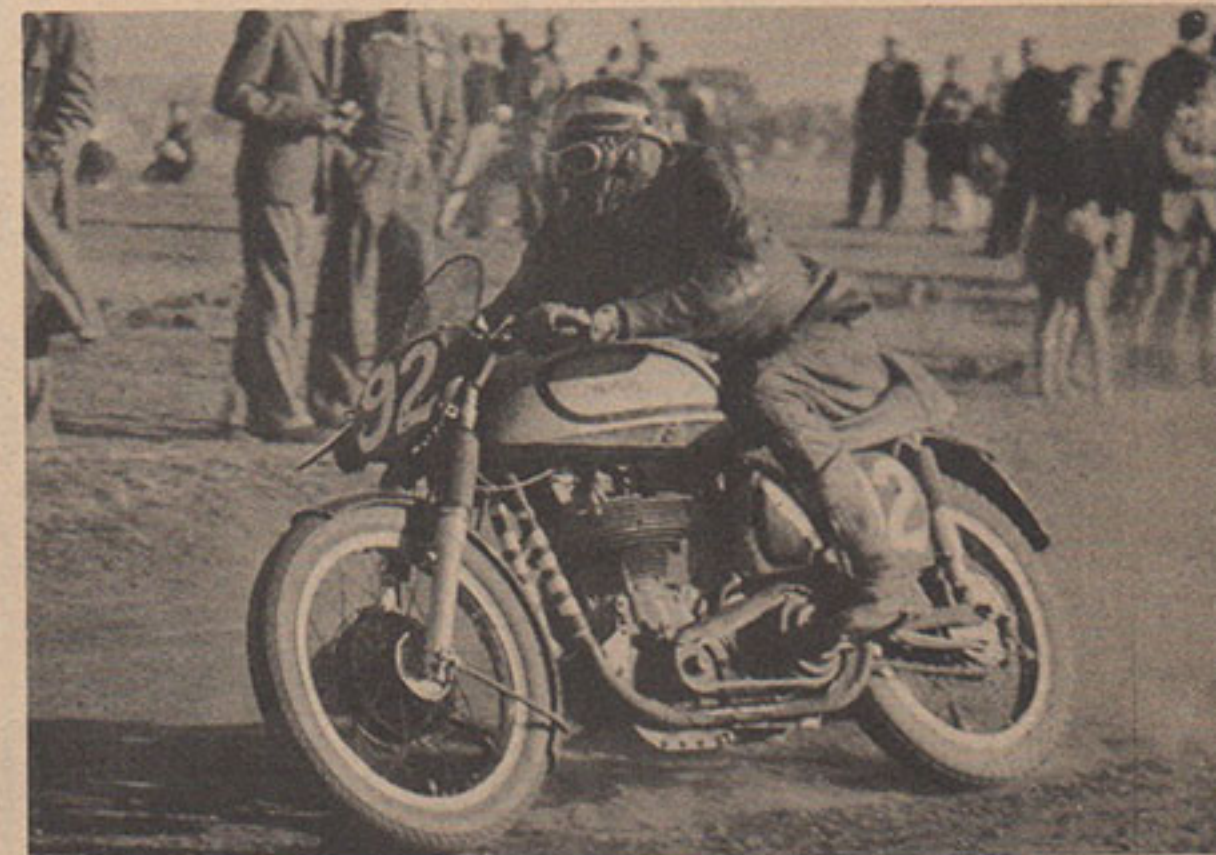


Bobby Quick, one of the youngest speedway riders in the world at age of 5 years, 8 months

country of 2½ million white inhabitants the total two-wheeled population is around the 25,000 mark while nearly half a million autos are on the roads.

A few years ago the American twin was especially in wide use in this country and riders liked it for its huge reserve of power and comfortable ride. Our armed forces used Harleys almost exclusively during the war and many of the wartime machines are now in the hands of private individuals; but spares are scarce and prices are high. To give an example, the average British twin of medium size sets one's bank account back by about \$250 or \$750 while the racing jobs cost up to \$1,500.

Yes, South Africa is a great country for the two-wheel steed. The weather throughout the year is ideal for motoring, with little rain and bearable heat, and only on the Highveld in the winter do temperatures flop really low and then they seldom go below the freezing point. Roads are excellent and service stations plentiful. Hotel rooms are reasonable, and there is much to see—from the savage splendor of the wilds with their almost untamed natives to the sophistication of the big cities like Cape Town and Johannesburg. In all respects South Africa is a motorcycling paradise with the sporting side playing a big part in the whole scheme of things.



Rudy Allison winning the 1952 Nigel 100 on a "Featherbed" Norton. It has bettered 125 mph

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COVER The theme of this month's cover represents the vivid action of the Six Day Trials. From all appearances, we wonder if the European event is of a tougher nature than our U.S. enduros. A rider in the Six Day Trials covers as high as 275 miles per day, while our boys have bitten off as much as 500 miles without sleep. The terrain that is encountered by the European rider . . . could it be as rugged as that of "Impossible Hill" found in the Greenhorn Mountain grind . . . Cover by Chuck Doe.



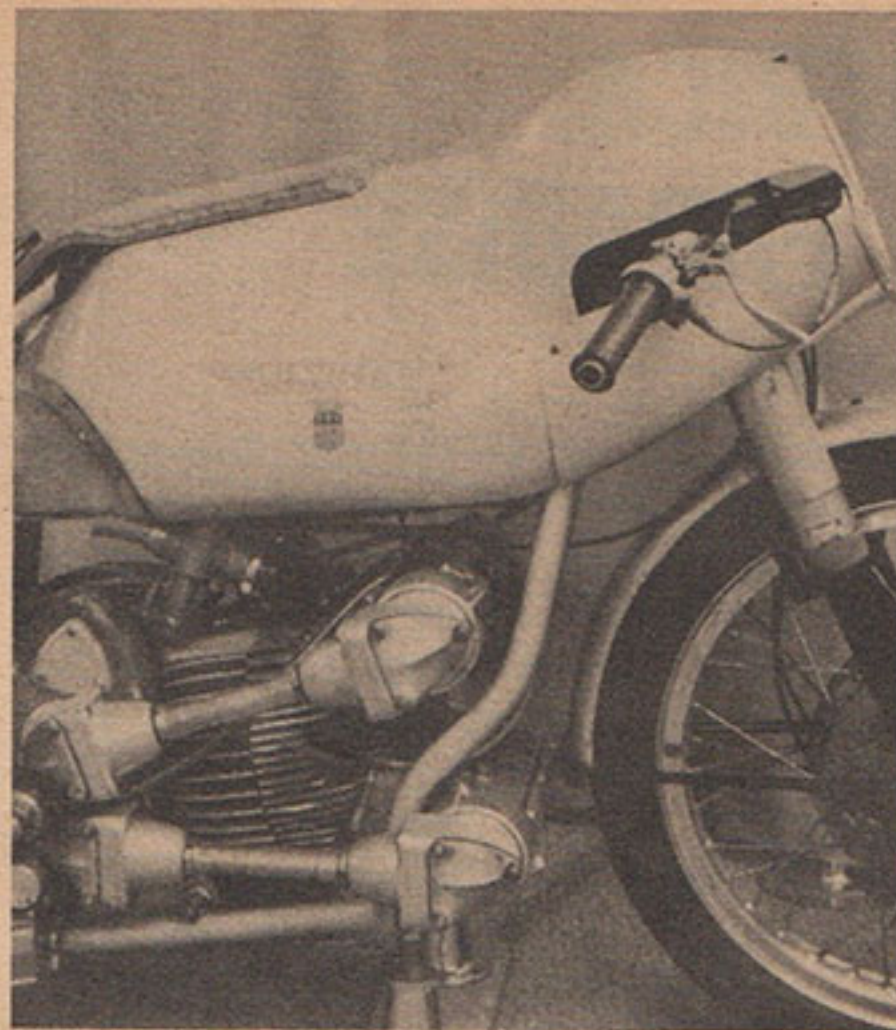
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PULLING BACK a corner of the curtain from next month's magazine, we see one of the extremes of the French Motorcycle Show. Double-billed with our own Motorama show coverage, the subject of new and interesting machines seems very promising. All of which leads us to ponder over the question: Which country appears to be making the most progress in the field of motorcycle advancement? Despite the finely made and popular equipment that most of us ride today, it would definitely seem that the Germans and Italians are more determined to strike a new pace than any of the other contending nations. American and British models for the coming year are basically refined versions of the past three years, with the exception of the big Norton and the small Enfield. As one rider so aptly put it: "I'm riding a bike that is four years old. I like it and I want to stay with the line but that particular company hasn't made a single vital change since 1949! All I can do is ride my old bike for an indefinite period of time longer or switch to another brand."

Although the French have hardly had the upper hand in the motorcycle field to date, it is obvious, from their glittering show-pieces, that they are thinking in terms of forward motion, not only in the form of speed from their vehicle but in the culmination of progressive design.

Three leaf clovers are more than a symbol of luck to the hare and hound clan, for this is roughly the shape of the 1952 National Hare Chase. Appropriately dubbed the "Billy Goat" run by the sponsoring Rams M/C of Los Angeles, this year's mad gambol will be the first in many a moon that hasn't been the annual project of the Three Point Club of Hollywood. Breaking into big time, the Rams' men promise their first National will have all the goodies a rider could ask for. Nor has the nail-biting spectator been overlooked; the clover leaf course looping back into the start at Lucerne three times before finishing at the same spot. No less than a ton and a half of lime will be spilled along the 150-mile course to guide the teeth-gnashing Amateur and Expert horde that will rocket out of Dead Man's Corner, 12 miles west of Lucerne Valley Junction, at 9 a.m., come December 7th.

The Mustang Motorcycle Corporation took a double-barreled shot at news headlines recently when, in addition to cracking the 100 mph mark with one of their 22-inch Specials, they made announcement of a new factory owned distributorship that has been established at 10 West 19th Street, Kansas City, Missouri. The new distributorship will handle sales and service for the full line of Gladden engines and Mustang motorcycles, plus operating as a sales office for their line of aircraft components. No other than Walt Fulton, Mustang's champion in the competition field, has been appointed branch manager and will handle both sales and service from the Kansas City plant, which has complete warehouse facilities and a parts department. Yes, Mustang has definitely made a foothold in the American motorcycle industry, one that is both welcomed and promising.

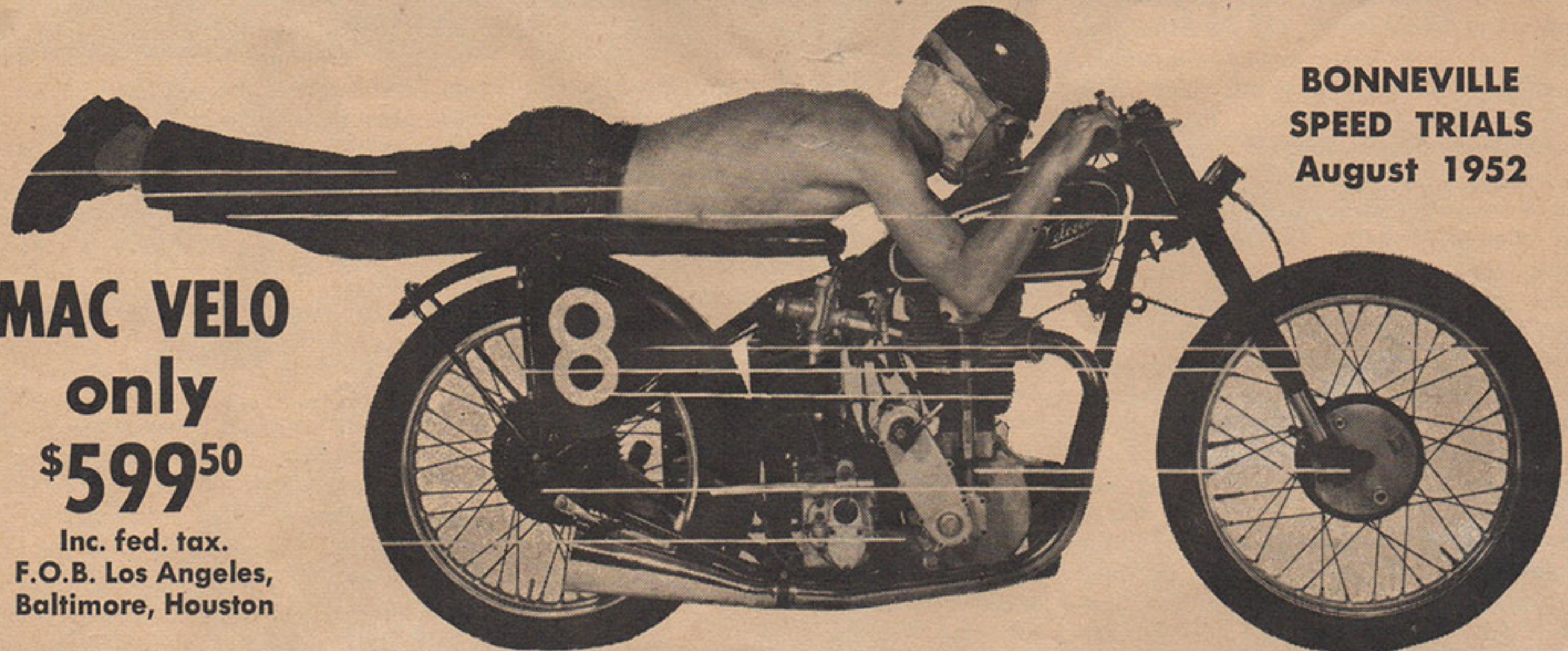
"Turning It Up," the title of a new motorcycle handbook being published by Attenborough Bros. Ltd., Moor Street, Birmingham 4, England, represents a serious attempt—reportedly the first—to provide the motorcycle trader, whether operating in John O'Groats or Java, with a practical reference manual comparable to those of the automobile industry. It covers day-to-day sales requirements and necessary data for the first class motorcycle firm. In short, this handbook contains a mine of info regarding British machines which took the experts six months to compile and should be of the greatest help to American dealers. It all goes for \$1, including electrical wiring diagrams, which is claimed to be below actual cost.

Big news for the man in the street! A true class D road race is scheduled for Torrey Pines this December 14th. All practice must be made on Saturday, the 13th, and all machines must arrive at the course complete with stock equipment, including mufflers, lights and fenders. Batteries, lights, front fenders and mufflers, etc. can be removed at the track but the implication is that the machine must at least arrive at the scene with a stock setup. This is definitely not a class C race and it will not be necessary to have an AMA Competition Card (only a regular AMA riders card). Posters should be in the various shops by this time but intentions are to limit the entries to the first hundred received. In keeping with class D regulations, factory racing kits will not be allowed. The 3.2-mile, all-paved course will handle a mass start, with the larger machines breaking first. Classes will be: 200 cc and under, 201 to 350 cc inclusive, 351 to 500 cc inclusive, and 501 cc and up. Experts, Amateurs, Novices and non-competition are all invited, will all ride together. Those desiring entry blanks should write to the California Sports Car Club, 8517 Santa Monica Blvd., Los Angeles 46, California.

That's 30 for this month—don't forget that a subscription to CYCLE makes a dandy Christmas present and requires no shopping!

119.87 m.p.h. on a 21 in. VELOCETTE

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from Start
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RIDER WRITINGS

Gentlemen: I am writing this in reply to Mr. J. S. Rand's queries printed in the Nov. '52 issue of CYCLE Magazine.

Have you, Mr. Rand, ever done more than look at pictures of American cycle equipment? If you had tried out some of our "antediluvian" rigs, I'm sure that you would not be so hasty in your condemnation. How you can look at our "high" bars and still use those stubby little back-breakers on your machines is really beyond me. Using your flat bars, a rider's arms are in a position which is almost (mind, I say almost) parallel to the front fork tubes; this means that shock from the front wheel is transmitted directly to the rider's arms and shoulders. When high bars are fitted the rider's arms are out in front of him, in a position which allows the shoulder joints to act as they were designed to function, *i.e.*, hingewise.

Tell me, sir, do you relax by going into a "sprint-runner-crouch"? You don't? Then why sit in that position on your cycle? With English foot rests in their high and far-back position and flat bars the rider is crouching, not sitting. We here in the United States like our transportation devices to embody comfort.

As for saddles, words almost fail me! My first reaction to your views on this subject was "Blow me, 'e's in 'is cups." I have yet to see an English saddle that takes the human form into consideration, most of them being convex on the "sitting surface," as soft as marble.

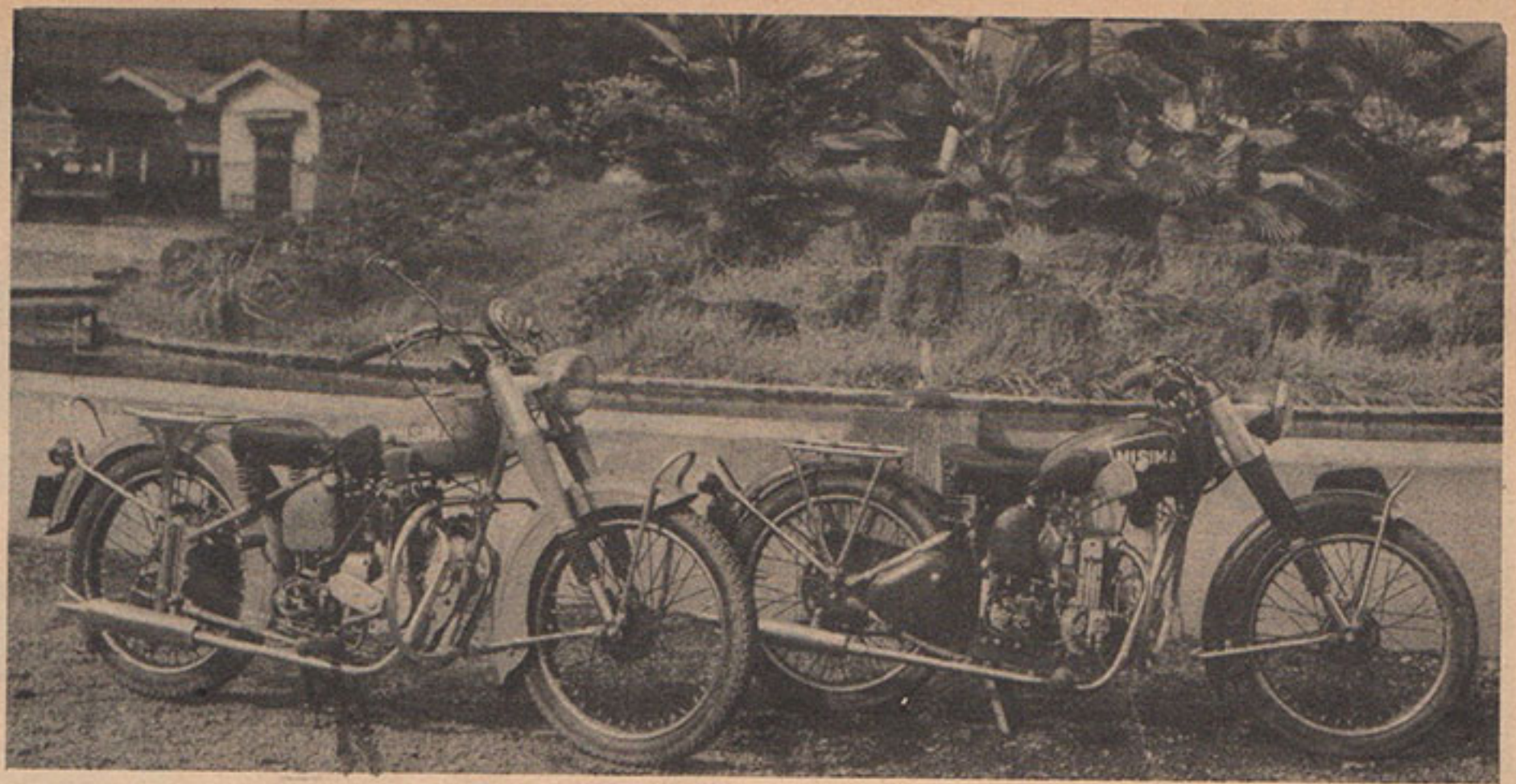
One more item before I close. Since we're on the subject of comfort, we can't overlook the little matter of the motorcycle itself. To the non-riding masses over here there must be the impression that English motorists are all of the 5 foot 2 inch 96 pound variety because of the diminutive size of the machine itself. Rear springs are great items, but they can't absorb the shocks that even our un-sprung heavy models do because of their greater mass. Even the larger "Limey" bikes are sad comparisons, in the comfort department, to something like the big Indian Chief, which weighs nearly 600 lbs. and has springs front and rear.

I hope that this answers your questions.

Bob Godfrey
Wilmette, Illinois

Dear Bob: Thought I'd bring you some dope on an average Japanese bike. Here are pictures of the two models the "Mishima Co.," of 2348 Kimachi Mishima—Shizuoka Dist., Japan, puts out. They are the "Orion" and "Queen Star."

These machines are slow because the speed limit here is 35 mph and the hills are steep, calling for larger gear ratio. Be



interesting to see what these things would do stripped and tuned.

The Japanese have amateur races and a professional circuit, too, where betting is done as with horses.

If I can wrangle a test ride from a nearby factory I'll send you the results.

Vaughn M. Greene
APO San Francisco, Calif.

Dear Sirs: The fact that I subscribe to your magazine is proof enough that I enjoy it. But, after reading my Oct. issue I find I can no longer control myself.

On page eight of your Oct. issue you show an extremely attractive Triumph. A machine that required a lot of hard work, and even more important, a lot of thought to bring out its functional beauty and make it the top bike it is today. But you can only afford ten lines to describe it!

On the other hand, you generously supply no less than forty-four lines to describe the idiot's delight collected by Gottfried.

I ride a '51 Harley "74" which has 18" wheels, bobbed fenders, NO accessories and a stock muffler.

T. H. Harris
Santa Cruz, Calif.

Dear Sir: I have been reading your magazine since its inception and have always found it both absorbing and colorful. In regards to your road tests, I think them a little too colorful. You seem to praise every cycle tested and find only minor things at fault but fail to point out the vast and real weaknesses of almost every model you write about. Never is mentioned in your praising periodical about electrical systems that never work, voltage regulators burning out periodically, cables ever fraying, oil always leaking even on new machines, sensitive clutches needing constant adjustment, vintage design magnetos that were obsolete long ago, speedometers never reaching thirty thousand miles without needing repair. The illumination from a British headlamp is usually the color of the setting sun and when the motor drops to an idle the sun usually sets.

A. Neff
Philadelphia 24, Penn.

Dear Bob: What happened to the remaining 1% of the distribution of the weight on the DOT, as indicated below the bot-

tom right hand picture on page 16 of the November issue?

The "Enterprise" looks swell. BUT! Saddle height is 28 inches, width probably being 8 to 10 inches. The rider's legs would have to be upwards of 32 inches long. (Mine are only 29 inches, preventing my riding Courtney's machine.)

Florence W. Crow
Los Angeles 44, Calif.

Editor: Sure enjoyed Jim Earp's stories on Don Johns and Joe Petrali. I will never miss CYCLE as long as stories such as these continue. Liked story of Johns better. On page 24 of the Sept. issue Earp claims that Petrali "turned one mile" on a 1/2 mile dirt track at 24.65 seconds. Rolie Free had a hard time doing a 1 mile straightaway in :22.99 on his Vincent at the Bonneville Salt Flats. What's the dope?

I ride a cut down 37 Indian Chief that always surprises anyone who doesn't know what's in it. How about an article on California style chop-jobs. You might give some of the boys ideas.

Tom Garcia
Bloomfield, New Jersey

(Dear Mr. Garcia: Guess I'll have to take typing lessons. I meant to write "one lap" on the 1/2 mile track at 24.65. Thank you for your interest in these articles and for calling this error to our attention.—Jim Earp)

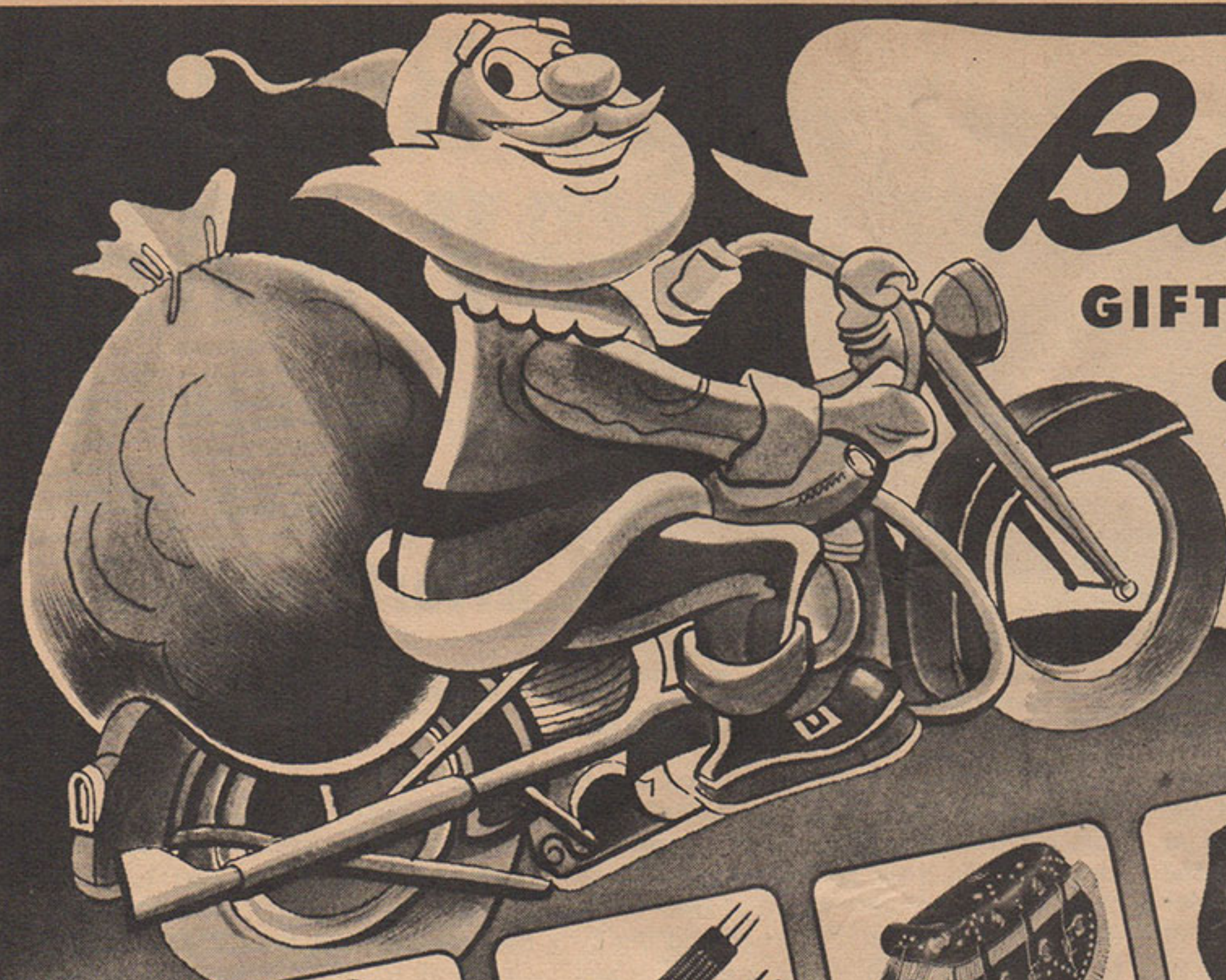
Editor Cycle: Did old man Hawkins finally drop dead? He must be 900 years old by now. He taught me how to spin circles in 2nd gear 25 years ago when he was working for the Henderson X factory. Anyhow, his "Crossed up" column had good dope in it. Though he used to ride twins and fours in competition, he always used to say that a single was more efficient mechanically. Has he finally learned better? Give him my best as I haven't seen him since about 1930.

Ray Clune
San Francisco, California

(Bud Hawkins is definitely still around, rides a Beezer single these days—ED.)

Dear Editor: In your November edition in "Another Scalp for Indian" you stated that Bobby Hill thus annexed his third national crown of the year. It was actually

(Continued on page 9)



Buco

**GIFTS THAT
CHEER
THROUGHOUT
THE YEAR!**

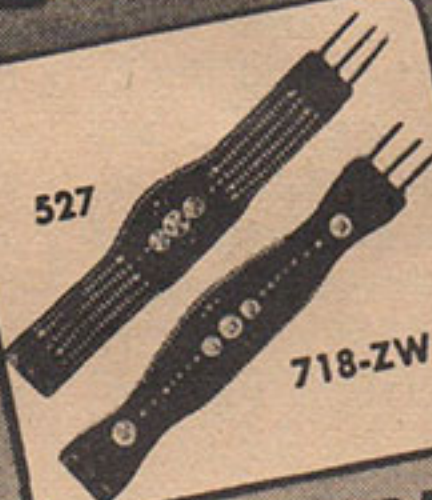


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527

718-ZW

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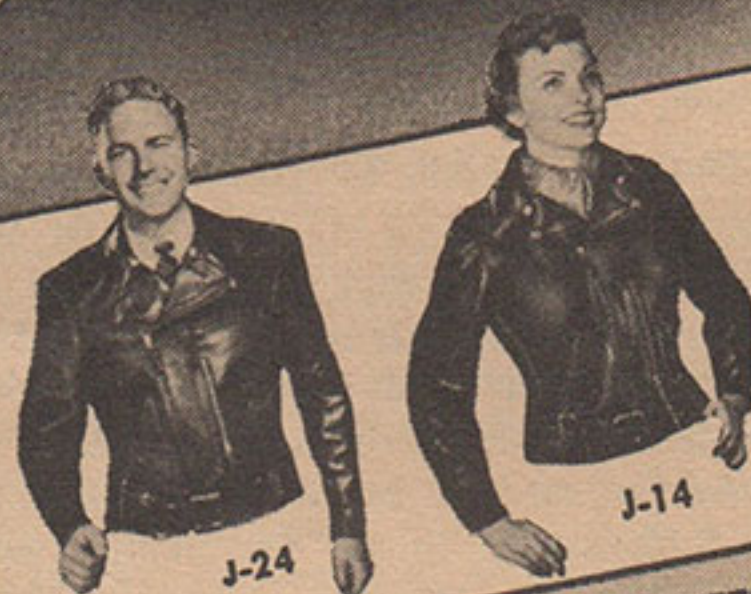
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J-14

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4031

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UW-21



A-81

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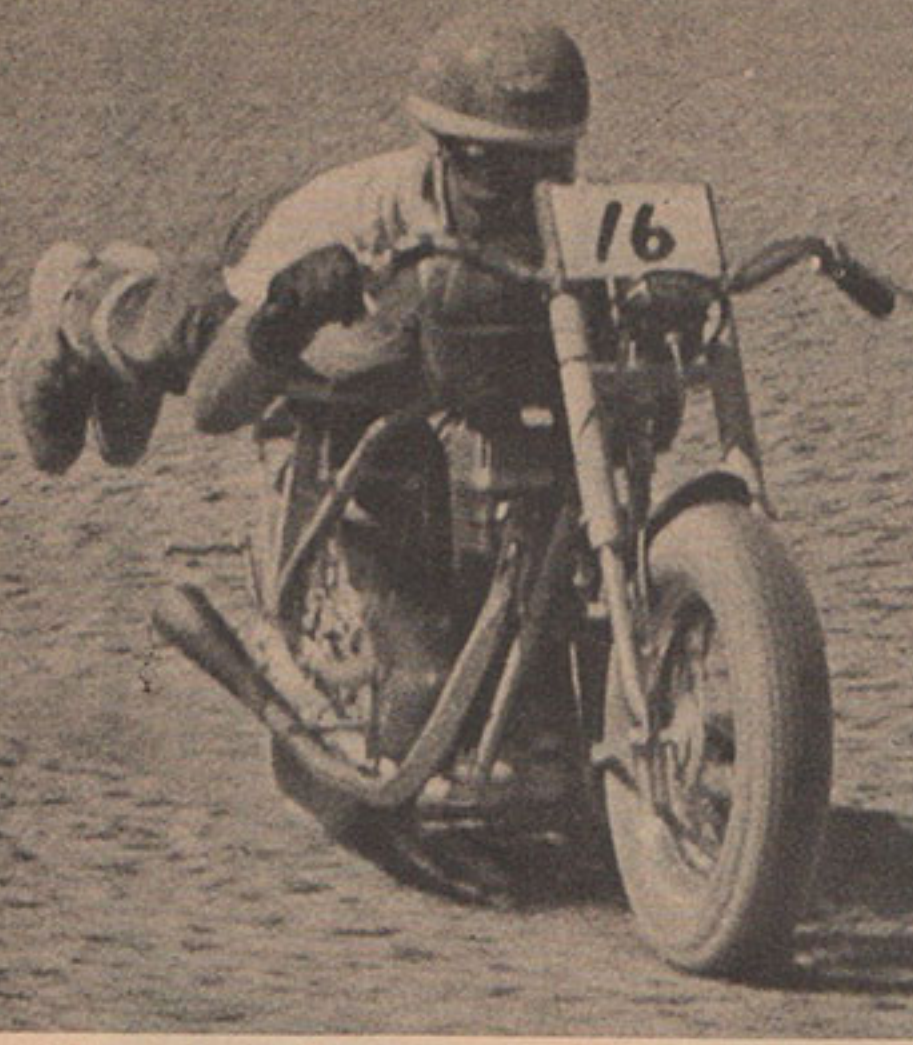
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MUSTANG BREAKS CENTURY MARK



Correcting a little side-draft with his legs, Walt Fulton champions the Mustang cause at a 100 mph clip. 22½ cubic inch, four-stroke single packs 6.4 to 1 compression ratio, uses a 1⅛-inch Amal carburetor and an experimental head machined out of a solid block of dural for the speed run

BEING IN a class by yourself isn't always what it is cracked up to be. That's the position that the engineers at Gladden Products, manufacturers of the Mustang Special, find themselves in, for although they have just succeeded in cracking the century mark with their tiny 22.50 inch single in an unofficial speed record established at the Glendale M/C sponsored dry lakes meet, the builders of the little iron horse know that to compete for national recognition they must enter on the same level with Loyd Bulmer's 21-inch overhead cam KSS Velocette. While it is generally conceded that an overhead valve machine has greater possibilities for speed, it is too much to expect a flat head engine be paired off against an even more potent overhead cammer.

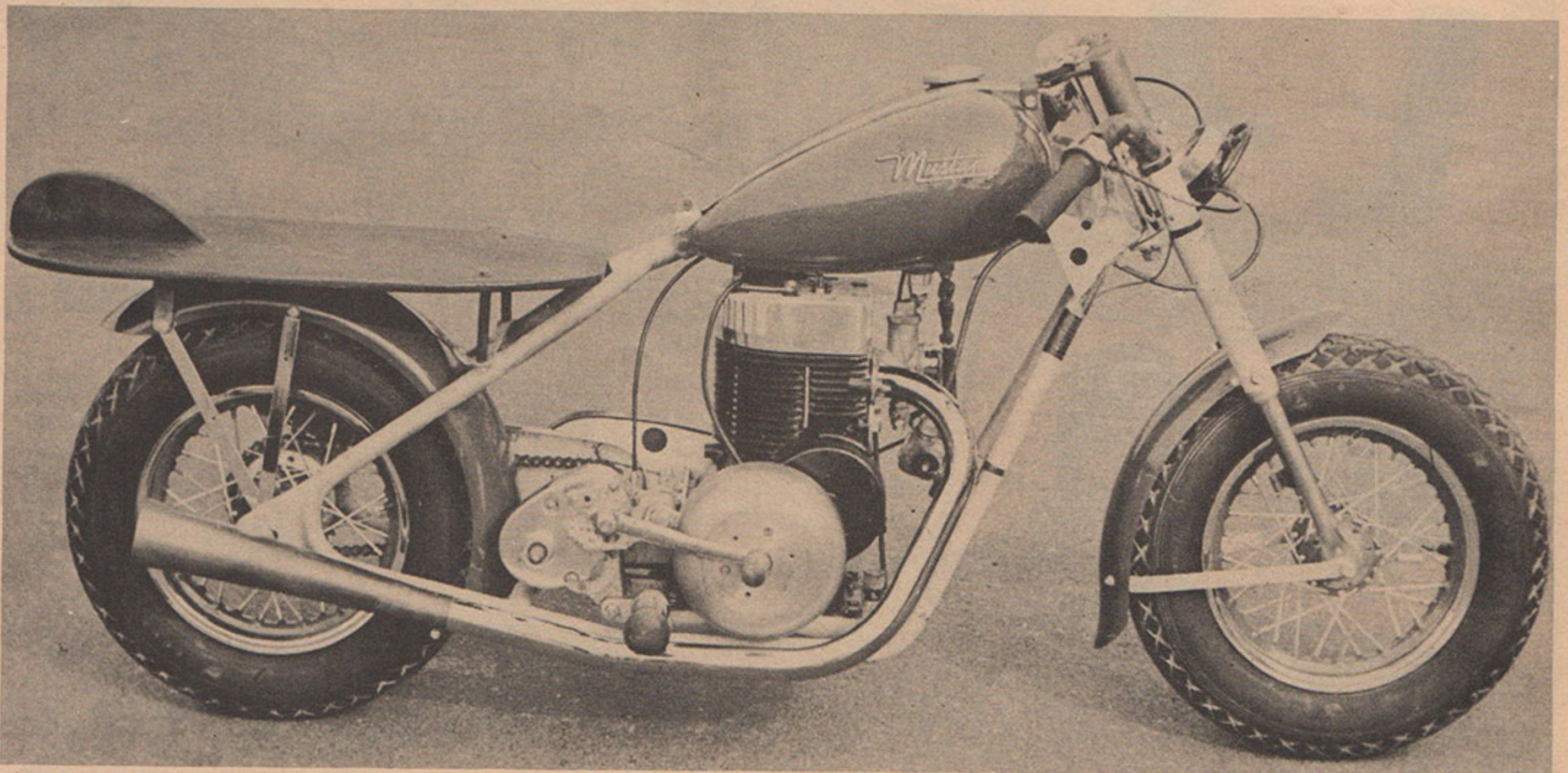
Whether or not Mustang will have a chance at the next national lakes meet by

entering at the more docile 21 inch Class C level is debatable, although a look at their past performances in speed does seem encouraging. In 1947 they ran 62 mph, in 1948 it was 77 mph which soared to 86 mph in 1950, 90 mph in 1951 and finally this year, 100 mph. Since speeds always seem to jump at Bonneville due to the atmospheric conditions and excellent road surface, it is reasonable to assume that any slump in speed made by turning to gasoline instead of their present fuel set-up would almost be off-set by the aforementioned favorable conditions. In view of their near eight miles per hour average rise in speed for every year since 1947, it seems possible that by next year Mustang could be hitting between 100 and 105 on gas at Bonneville.

Their recent 100 mph sprint at Rosamond Dry Lakes furnished many an inter-

Achievement rewards five year efforts of U. S. manufacturer

esting view on cause and effect regarding fuel and gearing. At 100 miles per hour the engine was turning 6400 rpm with an initial gearing ratio of 3.27:1, which was changed to 3.01:1 on their final runs. On his first try, rider Walt Fulton tripped the clocks at 87.56 mph, which was bettered at 88.73 on his second ride, followed by 100 mph even on his third time out. A combination of methanol and 25% nitro fuel mixture brought a speed of 92 mph, but an inspection showed that the primary chain had tightened up, and after the proper adjustment the bike was run through at an even 100. Following this, the gear ratio was raised and the fuel potency riskily increased to 40% nitro, after which the bike still registered an even 100. From that time on the speed uncannily remained right on the century mark without the slightest fractional variance.



Tuned by Howard Forrest, Mustang's chief engineer, the "Century job" is kept in shape by Bert Brundage and Joe Richards. Experimental cam, ball bearing mains and ball wheel bearings contribute to speed. Standard oiling system handles extra revs. 4.00 x 12-inch, 4-ply Goodyear tires are mounted on wheels made up from Kelsey-Hayes rims. No brakes of any description are used, and rear sprocket is mounted on an aluminum spool. Magneto is standard Mustang with lighting coils removed. Stewart-Warner tach is suspended from large circular ring on shock-absorbing coil springs

RIDER WRITINGS

(Continued from page 6)

his fifth. You also said "and the 10 mile championship for half mile tracks at Springfield, Ill." His first 10 mile on the half mile was at Richmond, Va. At Springfield he won the 25 mile championship.

His five titles came thusly:

- 200 mile at Dodge City
- 25 mile at Springfield
- 10 mile at Richmond
- 10 mile at Syracuse
- 5 mile at Indianapolis

Hill's Indian is tuned by Dick Gross whose motors have won six nationals this year. Tuman on a Gross Indian took the Bay Meadows 20 mile for the sixth title.

Joe Peterson
Sturgeon Bay, Wisconsin

Dear Bob: I am earnestly seeking some hard to get information. In your June 1951 issue you had an extremely interesting article on the famous MV Augusta. I am literally green with envy to own one of these machines. Could you by any chance supply me with any information about where I could obtain material concerning these machines.

Let me finish by saying that it was your test on the Vincent that was the final selling point; I now have a Black Shadow.

Curt Brayer
Watertown, Connecticut

Gentlemen: I have enclosed the below clipping, from the Chicago Tribune, because I believe that it will be of interest to you as an example of motorcycle activity in the Chicago area.

RIDES MOTORCYCLE AT 120 MPH IN DRAG RACE

Ed Schwartz of Chicago set a track record when he rode a motorcycle 120.04 miles per hour in a preliminary heat of drag races at Half Day speedway yesterday. A field of 147 participated in cycle and auto races.

Before June of 1952 there was no legal means for the individual cycle rider to speed here. The opening of the Half Day drag strip has provided a place where riders can speed legally and safely; before its opening races were apt to be held at every stop light or open stretch of road.

Bob Godfrey
Wilmette, Illinois

Dear Bob: I want to congratulate you upon the story "Iron Man" Ham appearing in this month's issue of CYCLE. It's not often that we old fellows, who twisted a throttle in our youth, are afforded the chance to read a story that brings back the nostalgic memories of the days long gone by.

Norwood A. Driscoll
McMinnville, Oregon

Dear Cycle: Thanks for your recent article on Fred Ham. I've been looking around for a complete story on him ever since I first heard about him two years ago. For my money he was one of the greatest.

E. L. Gohr
San Diego, Calif.



LET'S TALK TURKEY ABOUT MOTORCYCLES

With RICH BUDELIER

(Note: Rich Budelier has had 35 years of motorcycle experience in riding, servicing and selling motorcycles. His comments in the columns below are authentic and to the point.)

Whether you're an old timer in motorcycling or are thinking of buying your first machine, here are some questions to think about.

How you will use your motorcycle is important since the manufacturers design them to perform three basic functions. If you want sport riding such as "scrambles," "cow trailing" and other competitive activities you need a motor with high road clearance, lots of power and acceleration plus light overall weight. The Harley-Davidson Model K is as fine a motorcycle as you can buy for this type of riding; it gives you nearly 100 miles an hour top speed, terrific getaway for drag racing, finger touch maneuverability and durability.

If you're more interested in comfort than competition riding, try the famous Harley-Davidson 74 O.H.V. More of these motorcycles have been sold than any other make. It offers comfort that no other motorcycle matches. For long trips, cross country travel and on the job where you ride all day, you'll be glad you selected this smooth-riding, dependable beauty. A demonstration will convince you.

If you're after economical travel to and from work choose the Harley-Davidson 165. This lightweight model offers unbelievable mileage of approximately 80 miles to the gallon. Your

present bus fare for one round trip will buy enough gas to get you to work and back several days. It's safe, with both front and rear wheel brakes, a complete lighting system, speedometer, horn and generator. And there's always room to park a Harley-Davidson 165. It's a real money saver from every angle.

When you hear others claim to offer very nearly the same, remember this: When you own a Harley-Davidson, you have the world's largest manufacturer of motorcycles behind you. Their huge dealer organization offers complete service and parts facilities in nearly every town in the U.S.A. No other motorcycle has the dependability of Harley-Davidson as proven over the years.

Where can you make the best deal in town? Why, from Rich Budelier, natch! I've been doing business at the same location for 33 years. I stand back of my deals as does the Harley-Davidson Company. You can buy with confidence. We give the biggest trade-in allowances and you can buy for cash or on time. Down payments are very reasonable with terms on a 1 year, 18 month or 2 year contract at bank interest. And beginning November 1st we give at no extra cost, a LIFE INSURANCE POLICY WITH EVERY SALE. In case of the purchaser's death, the balance owing on the machine is paid by the insurance. We can secure reasonable collision insurance for you too.

Come on in and talk Turkey: If you can't afford a new machine I have some good used motors I'm offering at Blue Book wholesale price. If you want the most for your money come see me today.

RICH BUDELIER

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LOS ANGELES 7, CALIF.
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IS THIS THE WORLD'S TOUGHEST RACE AGAINST TIME?

15-inch Moto-Guzzi wins 16-hour, 410-mile grind

By _____

UNOFFICIAL TROPHY WINNERS POINTS LOST

1. Bob Sothern	11	Guzzi (15-in.)
2. Ray Allard	11	BSA
3. John Bolotin	13	Har.-Dav.
4. Bill Pressey	14	AJS
5. Russ Good	14	Har.-Dav.
6. Dave Doney	16	Match.
7. Frank Ewing	16	Har.-Dav.
8. Chet Foster	16	Tri.
9. Gordon Smiley	16	Har.-Dav.
10. Ralph Adams	17	Match.
11. James Gamble	19	Match.
12. Keith McClintock	19	Ind.
13. Bob Greene	20	Tri.
14. Joe Maness	20	Ind.

SIDECAR

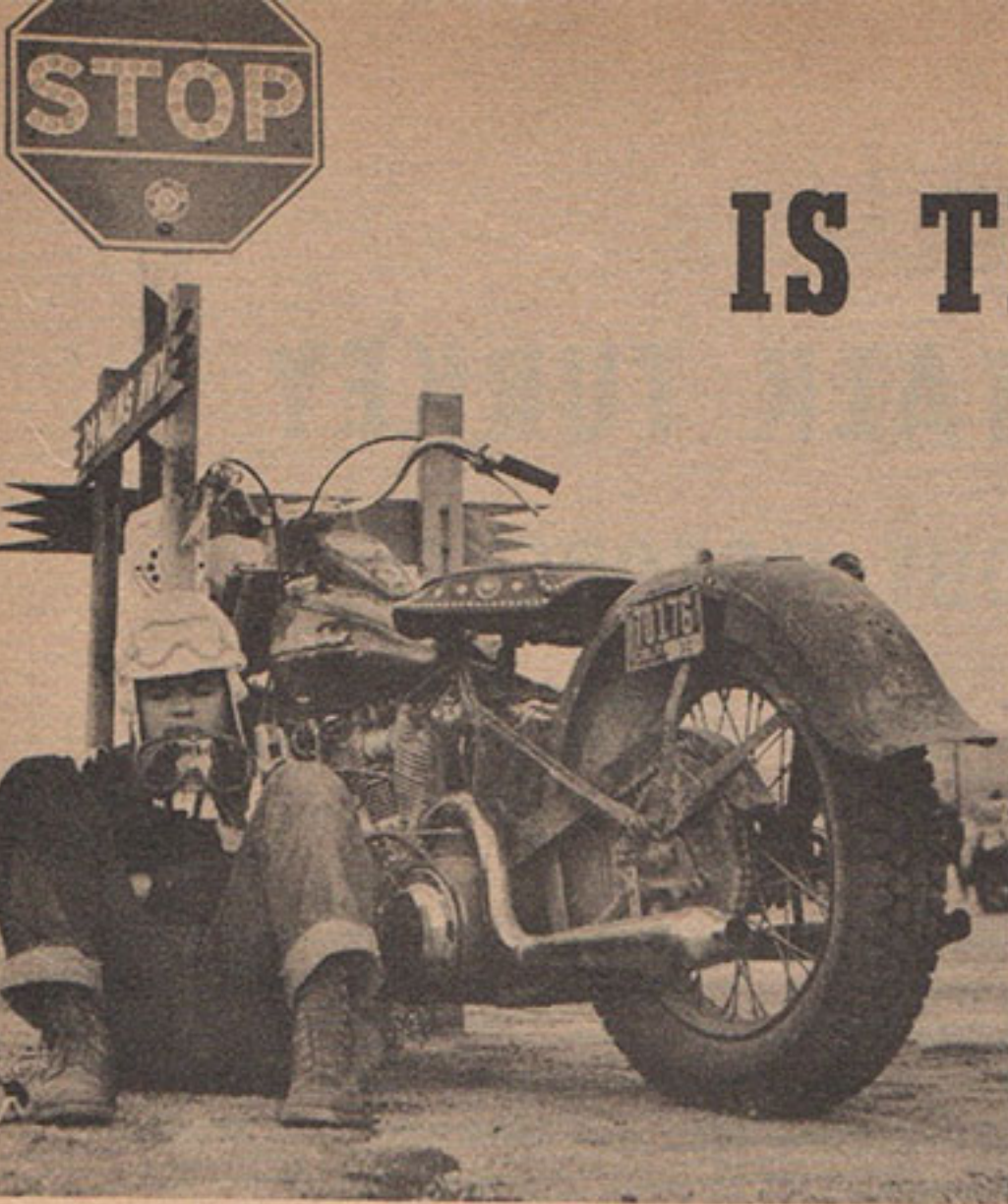
1. Rex Baker		
Gordon Simmons	964	Har.-Dav.
2. Larry Louis		
Ed Kretz Sr.	938	Tri.

Photos exclusively for
Cycle Magazine
by **Tommy Amer**

fastest of the pack. Reserving their Sunday punches for the daylight hours, the sponsoring Riverside Bombers held the night course to snaking mountain trails and stretches of flat-land dirt roads where a moderate throttle setting often netted as many points as a full one. The majority of the 193 starters were able to take full advantage of the hour and a half breakfast stop at the desert center of Joshua before warming to the hotter sections that were soon to follow. A glance at the sidecar crews (7 were entered), always a good barometer of rider fatigue, showed that few riders had been in trouble up to this point, lack of sleep being their biggest foe. Leaving on their own time, with no word from the checkers, three men a minute shot their bikes into the rising sun for a stab at the worst that was bound to come.

Good dirt roads led naively out of town and several hordes of riders bolted out to the five mile mark, taking advantage of the fact that there can be no checks, secret or known, that are closer than five miles apart. Then it struck . . . the full impact of the run came into sharp focus

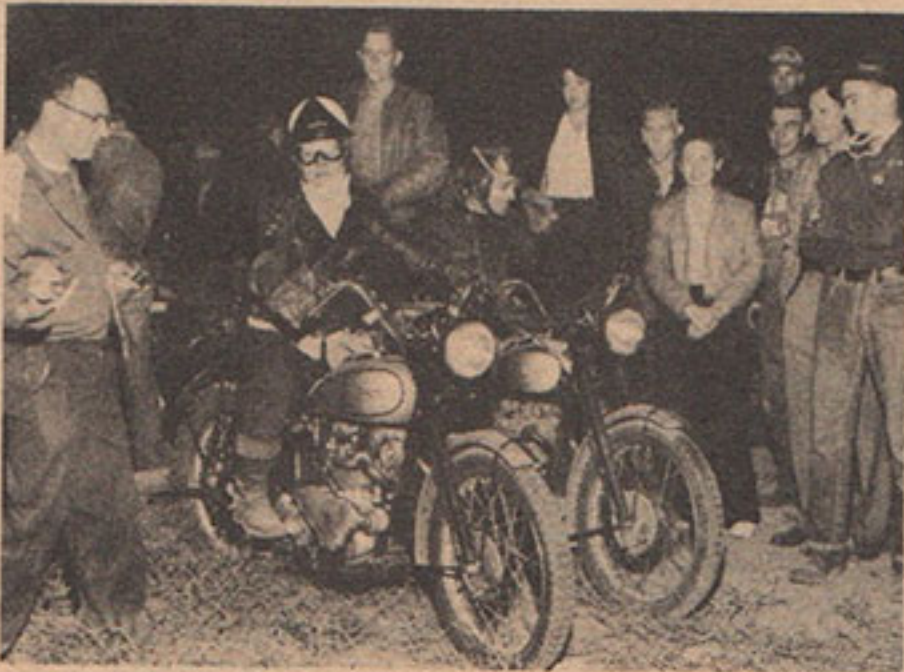
(Continued on page 36)



Commercial airlines pilot, Lloyd Zimmerman was only too willing to obey first sign of civilization at Joshua Tree breakfast check



"Now here's the way I got this thing figured, boys . . ." Hugh Hutchins, right, and Lloyd Larson (60 and 54 years old respectively) chat with two Orange County Juniors at start



Dottie Ellison and husband Hal, both on Triumph Trophys, champ at the bit on starting line as starter Doc Trainor counts the seconds



TOUGHER THAN the Greenhorn? Yes, often even more of a grind than the Jack Pine—that's the Cactus Derby. Unlike its counterpart in the eastern National, however, the intensity of the Derby varies considerably from year to year with but one exception: riders can always look forward to an uninterrupted and challenging 16 hours in the saddle with only two stops, one for breakfast, the other for lunch. Since the trying 410-mile ordeal starts at midnight on a Saturday, the average clod-hopper has little chance of closing his eyes for at least 36 hours. This fact alone compounds the hazards as the succeeding day wears on. Reactions slow and eyes that could instantly pin-point a fault in the course several hours before soon relay only half a picture to the tiring rider who may by this time be fighting off many of the other gremlins who plague the enduroist: cold, heat, muscular cramps or even motor troubles.

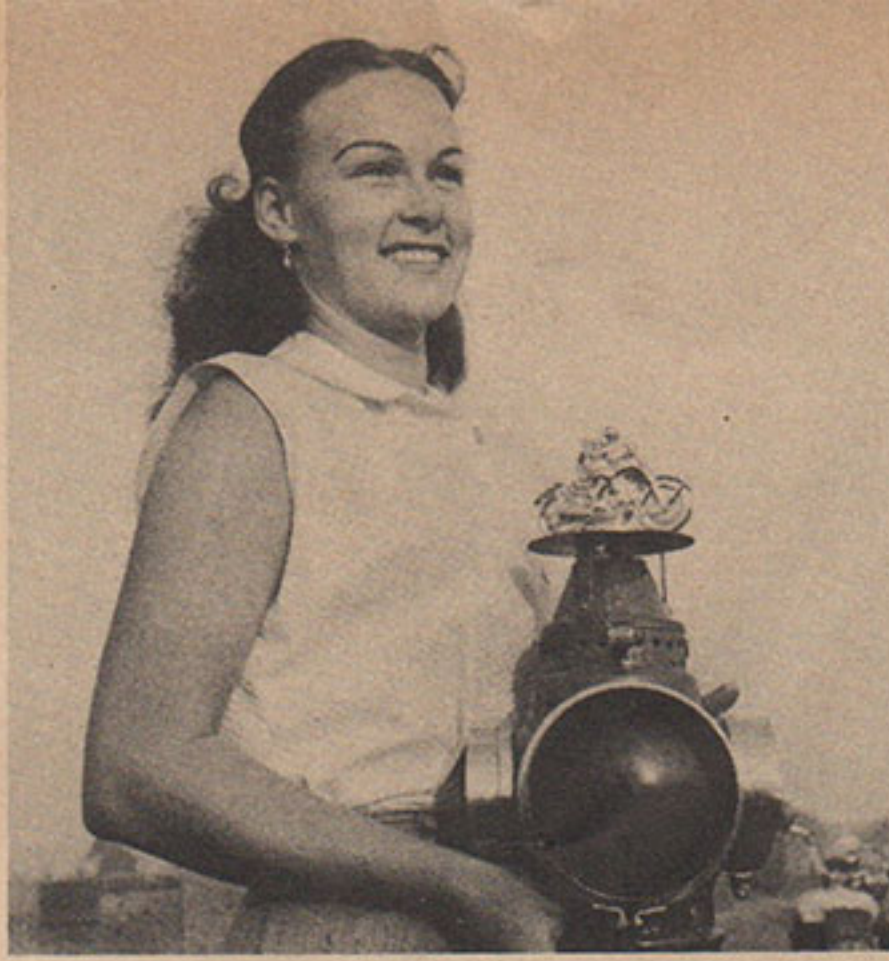
Always billed as a run for the "average rider" (what a man!), the annual Riverside ride, in the seven years since 1946, has gone on record as being everything from a push-over to might nigh impossible. Having ridden in the last six, I would score only two as negotiable by the average cyclist, three as a bitter tussle from start to end, and one, this year's, as somewhere in between. While only a few spots could have counted the novice out, schedules were often a supreme challenge to the



LEFT and ABOVE, Frustration in three acts. Homer Drown swamped his ancient JD Harley in flooded, mile-wide dry-lake bed, disgustingly checked ignition and plugs in vain, finally accepted tow from jeep-herding follow-up team



Hey, wait for "Pappy"! Larry Louis bores bitterly on up sand hill. Would-be pusher, Ed Kretz, gave one enormous thrust, fell flat and finally gave pursuit, heaving loud protests



Look what the last guy got! Tail light from an old caboose, found somewhere along course by lay-out crew, was wired for last place finisher's mantle, served up by attractive Lee Crowl



"Most commotion I've seen in ages," barked Sheriff E. W. Rusing, six-gun totin' traffic director of Yucca, noon stop. First Derby was run in 1936, then resumed in '46, after World War II



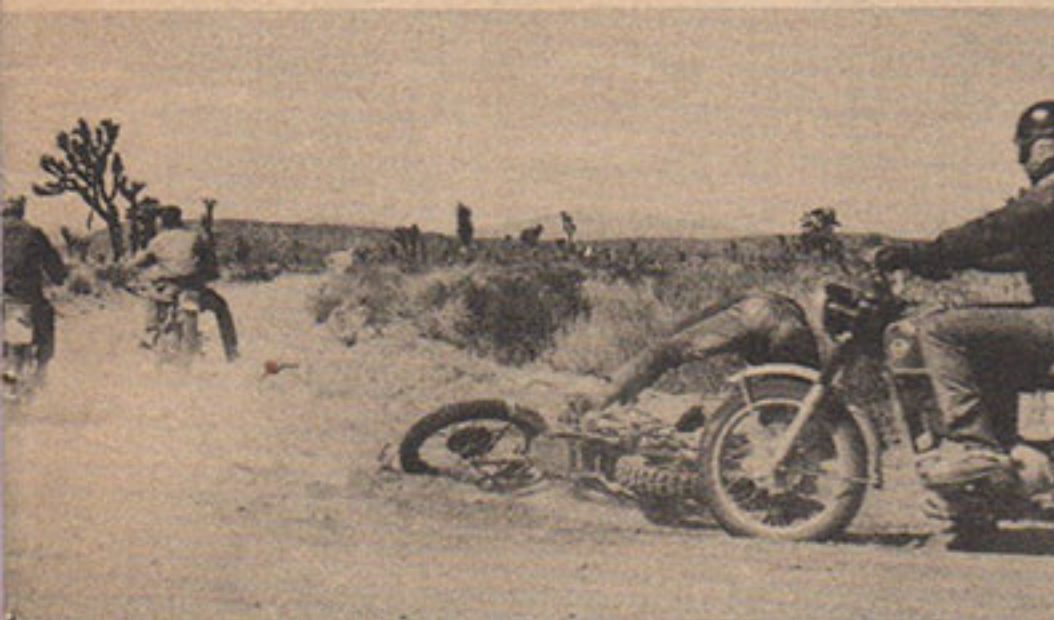
Levi Strauss says they'll stand the pull; this guy proves it. Quite often the road turned faster than the bike was capable of . . . crash!



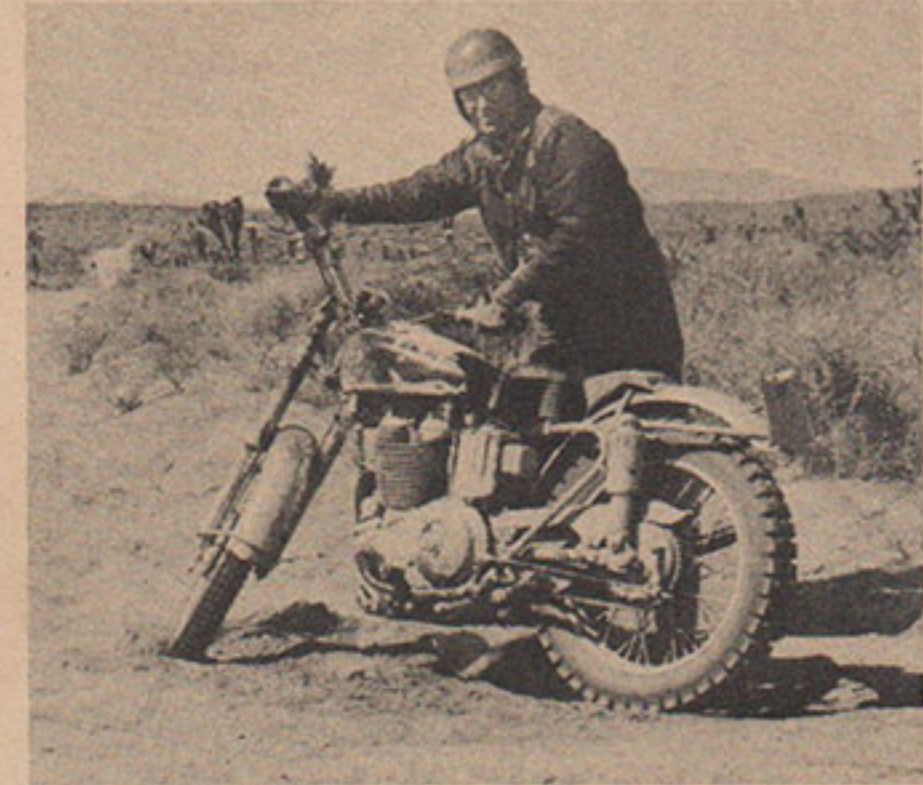
Getting his second muffler inspection by CHP Officer Chuck Pollard is Charlie Land of Tri-City Ramblers. Straight-pipe had to be muffled



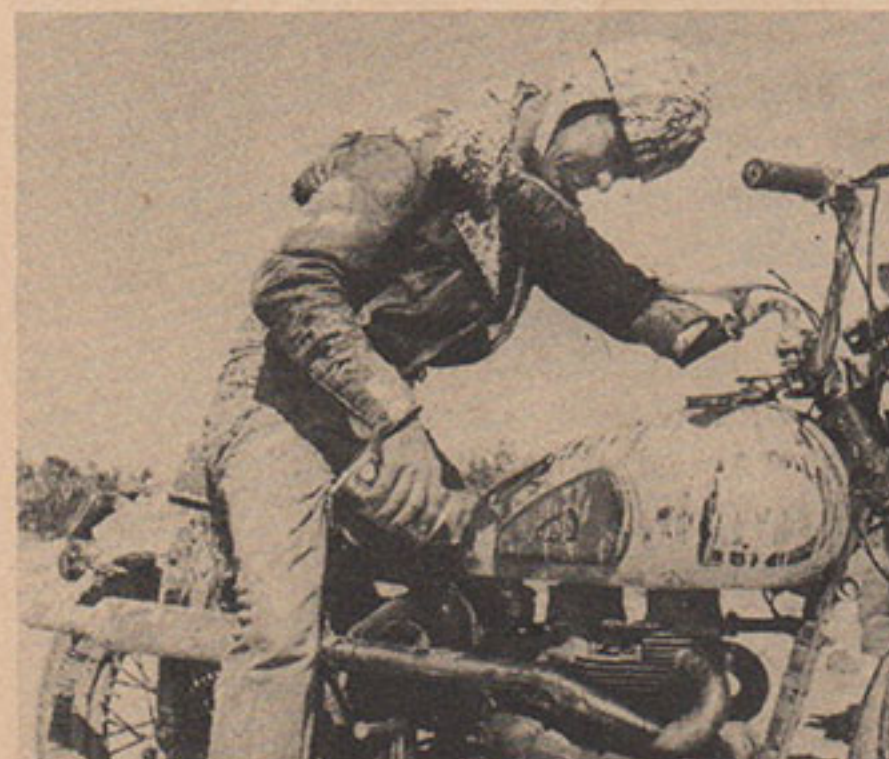
Merton Michel, K model, and Jack Green, OHV Harley, think nothing of coming from Albuquerque, N.M. for all of the big So. Cal. events



ABOVE and RIGHT, Crash sequence is typical of the hundreds taken along the way. Smart thing to do at this stage of game: take stock of all damage, physical and mechanical, before going on. According to casualty rate in enduros, riders appear safer than if equal miles were put on highway



Has the little woman been asking too many questions lately? This BSA rider decides to give his wife a first-hand view. Ray Tanner, riding double on a Harley OHV finished the run



Plucky Bill Adams, riding his first enduro, despite big handicap, single-handedly fought his way past the mud hole obstacle but was counted out when his doomed twin ran out of oil



An anxious moment in the dark as checker signs rider's route card, which was carried in tank-mounted envelope. Cards are turned in periodically; their loss means rider disqualification

It's a rough go when you're in the other guy's back yard, but the British went out of their way to make Bud, No. 23, feel at ease, wildly cheered him through races, sought autograph

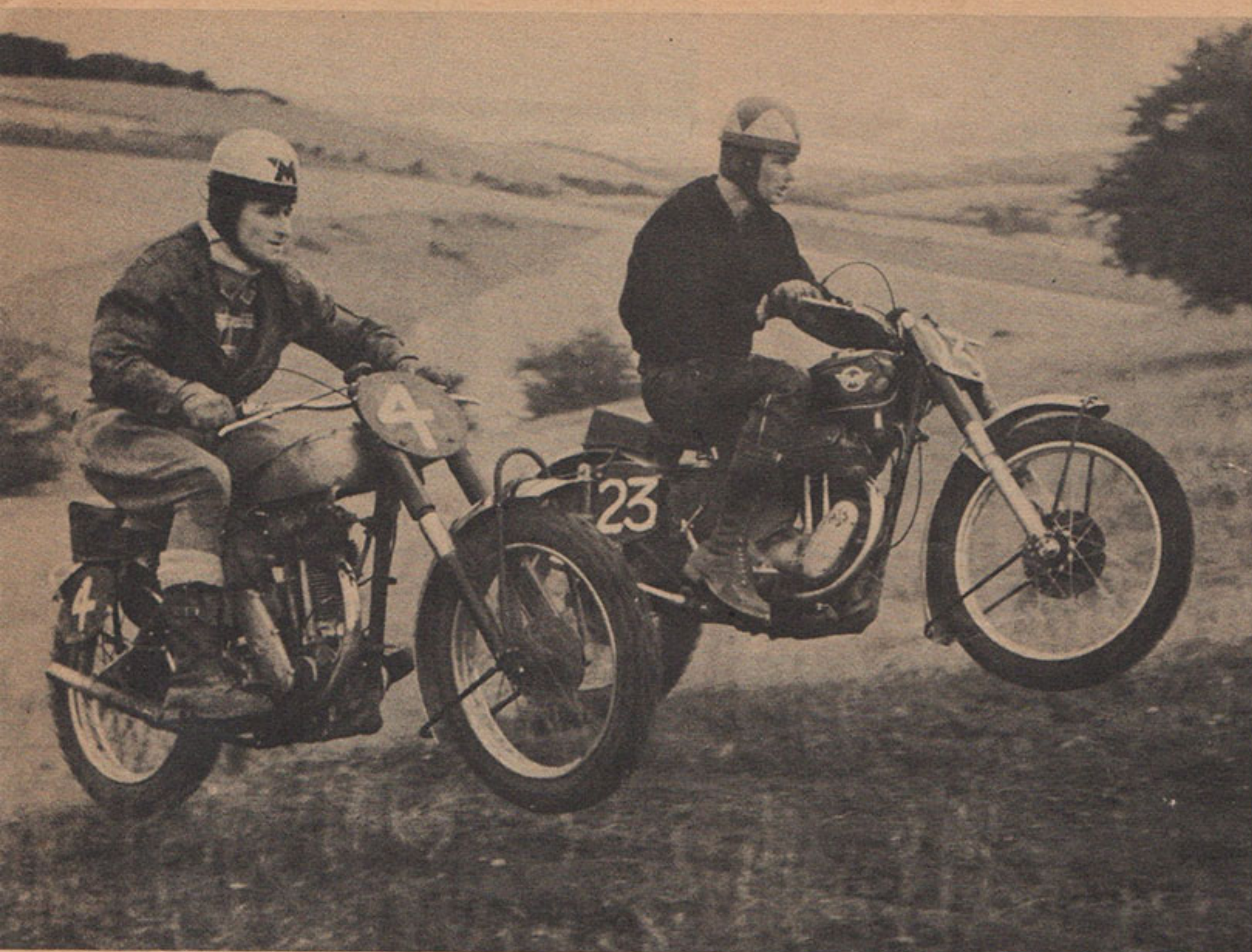
stretches, mud holes, hill climbs, hair-pin turns with adverse camber, and every bit of it is wet and gooey.

One event covers, at the most, thirty miles, so in such short distances, the riders can go full bore all the way. The English have no respect for bones or machinery, and lay out the course to give the maximum number of jump-off places. The winning riders love those spots and hit them wide open, fly six feet off the ground, thirty feet through the air, and the whole jump is so perfectly controlled that the rear wheel makes contact while the front wheel is still at least one foot off the ground. Top riders like Avery land with the motor screaming at peak revs, so that the spinning rear wheel, making contact first, pushes the cycle along before the front wheel touches. That gives a cushioning effect to the landing—something like the landing of a ski jump.

American scrambles courses avoid jump-off spots, but the British love them. In fact, the top men do *much of their passing in mid-air*.

Bob Manns, who is in charge of preparation and maintenance of the AJS Six Day cycles, took Ekins under his wing. He taught him the techniques of the jump, went over the tricks of the British course, and advised him to keep up off the seat during the races. The savage, high speed bumps of a scrambles will tear a man up internally unless he stands up on the pegs.

He pointed out that another trick of fast, cross country racing is to keep the front wheel light. The British, according to Ekins, only use the front wheel for parking the cycle. With the pegs placed to the rear in European fashion, and a 44 hp 30.50 factory cycle cracked to full throttle, the front wheel just bounces on the ground once in a while. Then a shift of weight to the pegs, a quick pull at the handlebars, and the front wheel will lift up to help the cyclist clear a bump or at-



BUD EKINS... 500 AJS... AMERICAN

Stars and Stripes Carried High in British Scrambles

By Jim Earp

B RITISH SCRAMBLES are just plain murder. Can you hit fourth cog while you're howling across an open, grassy field and then slam up a lumpy ditch bank, take off to fly thirty feet through the air, and land, going full bore, in a mud hole without strewing yourself all over the landscape? If you can do that five times every mile for twenty or thirty miles, you might make the main event in British scrambles.

Bud Ekins, one of the best cross country men in district 37, has just returned to Los Angeles after spending six weeks battling the top "hot shoes" of the English scrambling circuits. As he tells his experiences, it becomes obvious that the English scrambles are the wildest, hairiest, bone crunchers that we have ever heard of.

Ekins had long cherished a desire to see just how good the English riders really are, so, when Frank H. Cooper, AJS and Matchless dealer of Los Angeles, made arrangements with the Woolwich plant to furnish Ekins with a factory Matchless scrambling machine, he headed for England on the next boat.

Several serious shocks were in store for him on the "tight little island." Ekins had covered no end of rugged terrain in the California deserts, but the English scrambles courses are nearly all laid out on grass; and most of the time the grass is wet. Anyone who ever cracked a throttle remembers how quickly wet grass can drop the unwary rider on his eyebrow.

Whenever the grass wears away, the water logged English terrain immediately offers up a wealth of thick, greasy mud to further confound the cyclist. Ekins swears very piously that a patch of dry dirt in all of England would be a collector's item. The events are well named. The entire race, from start to finish, is just one mad *scramble* for traction.

The typical English course—marked out with stakes and string—is brutally calculated to separate the men from the boys. After starting on a wide, fast stretch that narrows down to a "you-cut-yours-off-boy-cause-I-ain't-about-to" bottle neck turn, the route goes up the side of a mountain. There are ditches to cross, jagged, bumpy

'E's soiled 'is ruddy gaiters in a blinkin' mud 'ole. The glamour of Continental racing is often cloaked in a generous layer of goo. Such sights add spice to the show, draw on men's stamina



tack a steep bank without losing speed or tearing the forks off. Ekins even shifted his pegs forward to the usual American position and still had no trouble picking up the front end of his hot, alchy-powered Matchless.

Ekins was lucky in that the 30.50 Matchless, which was given to him by the factory, had been the special machine of Bob Manns. It had been under development since 1946. Every new twist that the factory could dream up had been poured into it during those five years.

There are no restrictions on fuels, compression ratios, or anything else in English racing. As long as a cycle has the proper displacement, anything goes. So the factory entries are only faintly similar to stock models. They are bench jobs from start to finish. Every component is hand picked and brought to the highest peak of perfection that is possible by the best engineers and mechanics a factory can hire. All the equipment and resources of the manufacturing plant are put to work to make the racing cycle perfect. The motors are balanced, polished, and souped up to such a point that the 30.50 AJS, for example, develops 44 hp on alcohol and 38 hp on gasoline—and the motors are still reliable.

Weight is fanatically pared down. For example, the primary chain cover and the gear box housing are of light alloy. Even the speedometer is tiny, and it is placed down low on the side to cut out cable weight. The brake housings are drilled out as much as possible and the holes are covered by thin alloy sheet. When all is done, the factory job weighs *seventy* pounds less than the stock scrambles model.

In view of this, it is not surprising to learn that the factory machines always win. But they put on a show that draws as many as 100,000 people if the race is near London. Three or four works riders from both AJS and BSA, together with a couple more from Triumph, Royal Enfield and Norton, will all appear at a big event and put on a savagely contested race. Even the superb factory equipment can be torn apart by the spectacular jumps and violent riding of the team competition—chains split, rims bend, and the gear box can be ripped open.

When Ekins went up against that kind of experienced competition, no one expected him to make a big showing, so everyone was pleased and surprised when he never once failed to qualify for the main event, and even snapped up several third place wins in his first two events. When the third scrambles rolled around, he completely lapped the field in the first Junior event. He was a little too good, so, in spite of his sad and soulful protests, the officials firmly pronounced him a Senior rider. From then on he could only run against the big boys.

Bud could hardly shake the little 200 cc DOT two-stroke. Every time he came out of a corner, the wee one was right there. Note Ekins' conception of "flat-out" as compared to Bill Barugh on the dingling DOT. Bill, long experienced, often wins, even when put up against big boys

And his very next race was where the biggest boys gathered—the International Moto Cross Grand Prix of Great Britain. (Moto Cross and Scrambles are the same thing except that England uses the continental word, Moto Cross, when the event is international.) The Moto Cross at Cotswold counted toward the European championship, so it was the biggest English scrambles event of the year.

Ekins got off to a fair start in the Moto Cross, but the course was wild and wooly. The English riders were having a fine time jumping a ditch that crossed the course, and, during the first lap, Ekins also hurled himself across it at about fifty miles per hour. But it was, after all, only his fourth scrambles event, and he came out of the jumps in pretty shaky condition. He decided to slow down for the jump in the second lap. "That was a mistake," he said. "I should have poured it on. Any slower and you couldn't make it. My crankcase hung up on the far bank and I went off on my head. By the time I got going again, Avery and Leloup—he's the Belgian rider who won the European championship this year—went past me and I never did catch them again."

During the last five laps, Ekins delighted the crowd by engaging in a rugged duel with W. Barugh, who was riding a 197 cc Dot factory two-stroker. Ekins said, "I could hardly believe my eyes when that stinking little two stroker pulled up beside me. It was a factory special, of course, just as were all of the bikes here. Anyway, we fought for five laps. I would pull ahead in the straights, but then I would have to slow down for the ditch and some bumpy stretches. Then Barugh would go whizzing by me almost over my head and I'd have to catch him again.

"On the last lap, I thought he'd get me. That blamed ditch goes across the track just short of the finish line. Well, I cut off for the ditch and rode through it, but that Barugh just sailed over it like a big bird. Then the two of us dragged it out for the finish line. I caught him, but I wasn't ahead by more than one tire width at the line."

Although Ekins and Barugh finished fifth and sixth behind Stonebridge, Nex, Rick-

man, and Leloup, the excited crowd applauded them as if they had won. After the race, Ekins was besieged by autograph seekers among the friendly English crowd for so long that the factory truck finished loading and almost left without him.

In his fifth and last race at Tunnel Hill, Pirbright, Ekins finally hit his stride. When the splashing, leaping, and slithering finally came to an end, Ekins was the winner of the main event. He had moved from a Junior in an entirely strange form of racing, to a first place winner in just five races. That is derved good riding in any language.

His record looks even better when we consider that England is a small country and the top racing is centered around London. The distances between meets are small, so almost all the top riders can gather at each big race. In this country some of our best riders would be competing in the west, some in the east, some in the south and so forth; our top boys can almost never afford to travel the thousands of miles necessary to get together.

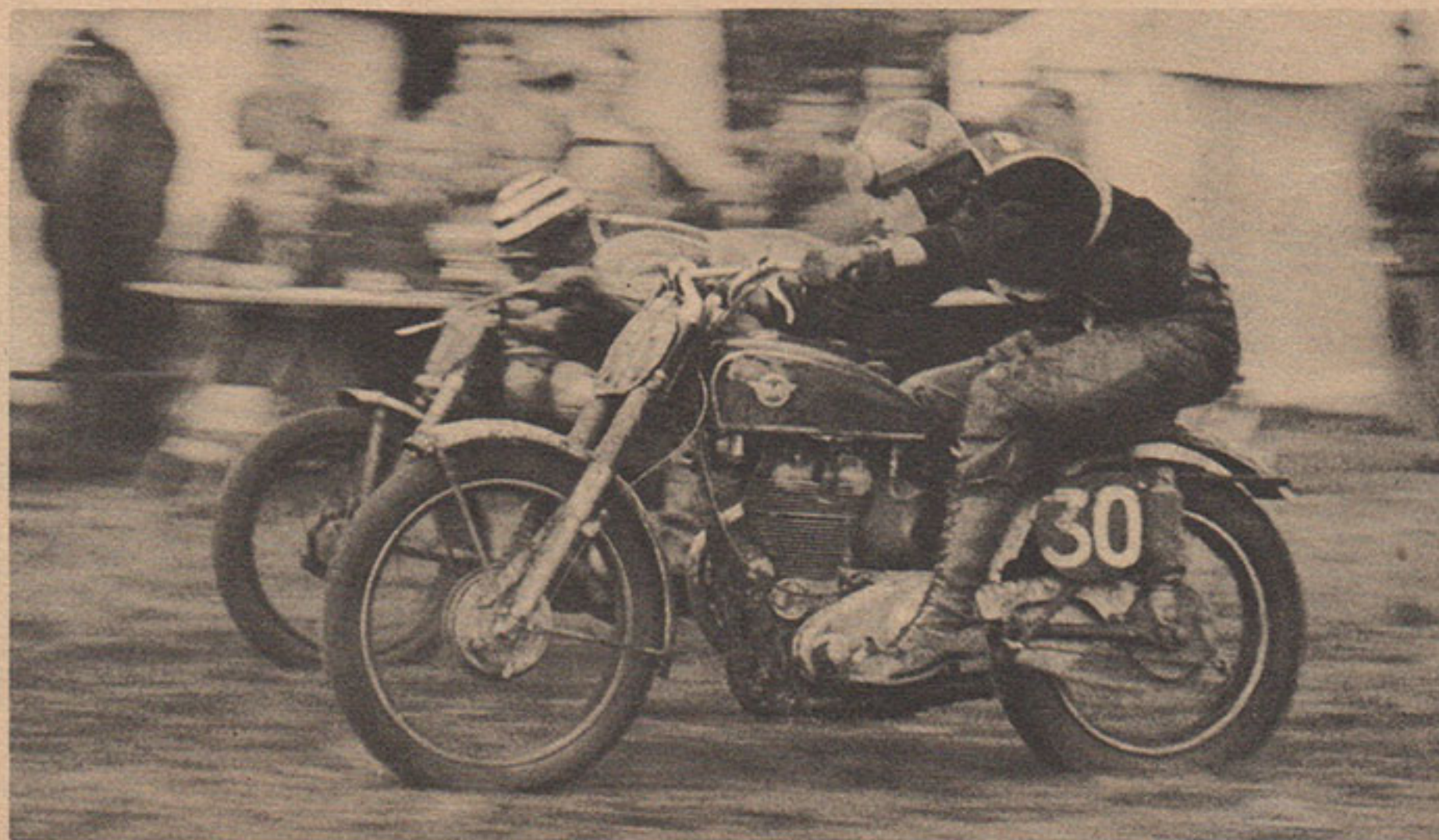
When Ekins qualified for the main event in each race, and then placed somewhere in the first five spots most of the time, he was competing against the best the country had to offer. His fifth place win in the Cotswold Moto Cross, then, would be the same as a first place in most of the American events.

Ekins has an enormous amount of respect for the British riders. He says that our top boys, like Nick Nicholson, could probably compete with the very best riders in England, but none of them could do it consistently during the first year over there. The type of racing is too different. After a season of practice, though, he feels that Nicholson could rank with England's best.

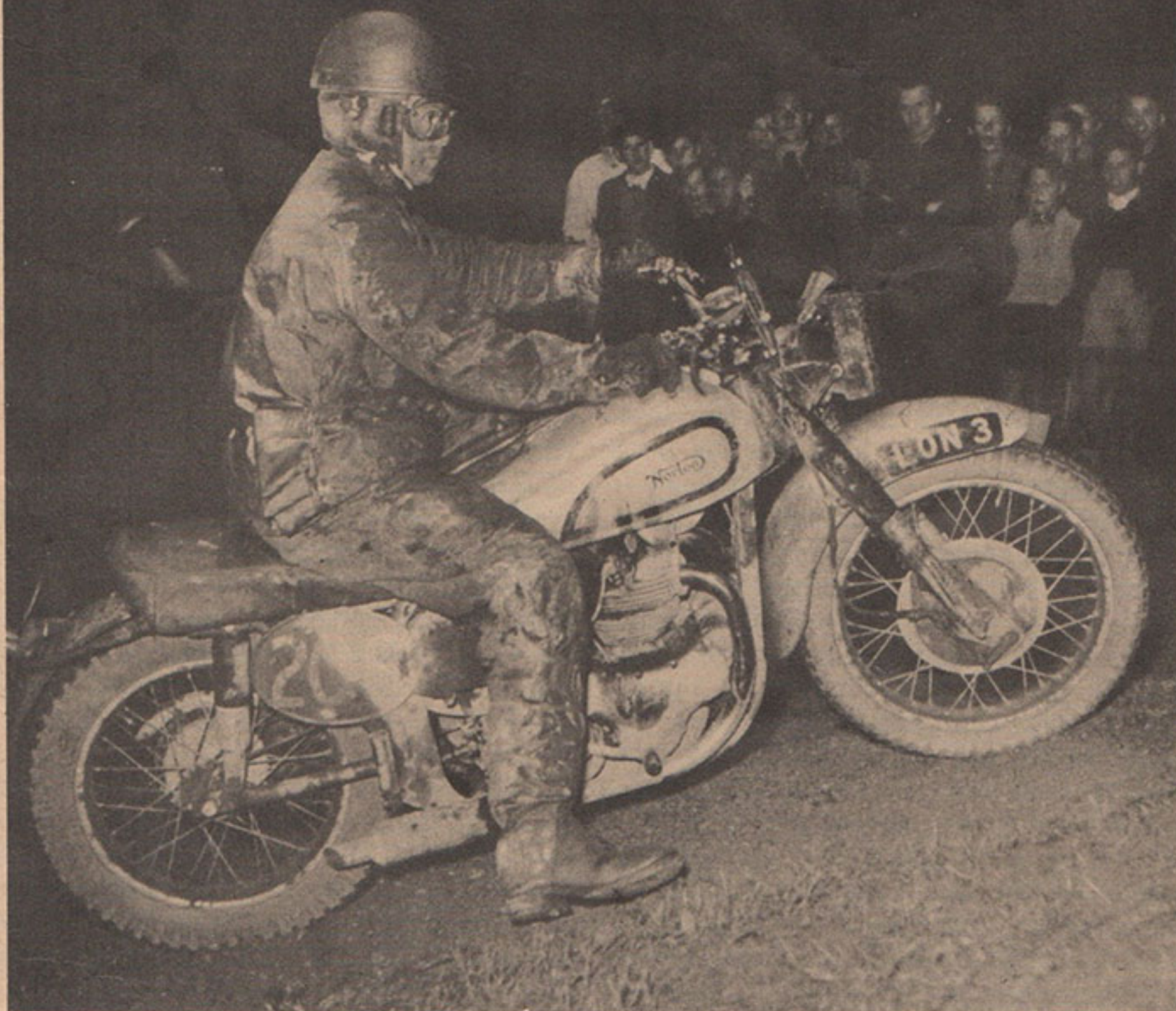
Then we had to ask about the English riders. If we put them on a stock machine and turned them loose in a few events like the Big Bear run, could they give us any competition on our home grounds?

"You bet your bottom dollar they could!" he replied.

So it seems that the limeys are tough boys. But then we are not patsys either. Bud Ekins just proved it.



SIX DAY SHOWDOWN



E. Breffitt attempts to uphold British honor and Norton twin on slippery night section. English leaned heavily on power and strength of 500 cc and larger cycles. Despite dashing display of riding, their staff gave way; leaking tanks, frozen gearboxes and electrical ailments shaking them from their usual perfect score standard. German trust in ultra-lightweights also failed

38 OF THE HIGHEST Alpine passes threw a bitter challenge to Europe's motorcycle elite this year when the 27th International Six Day Trials, held at Bad Aussee, Austria drew fire from six competing countries. Though individual merit is rewarded by medals, the prestige gained by international teams is held to be most important. 260 riders competed this year, with each day's course, of about 279 miles, quickly switching from narrow mountain passes to mud and slush covered hills and rubble roads, some inclined up

to a 35 degree grade. Still there were no really hazardous stretches since each path along side a precipice could be taken with caution, the time controls often being up to 58 miles apart. However, streaming rain, a new snow fall, fog and cloud banks throughout the first two days soon left the field to the champions, which, as was to be expected, included a number of Englishmen, who were the only ones appearing with heavy machines; all the rest had chosen bikes under 250 cc.

To fully understand the implication of

Czechs trim the elite in sapping motorcycle marathon

By WILLIAM ONSLOW

international prestige, some knowledge of trial regulations must be known. Highest prize of all, the silver trophy, is contested between teams of five riders. Each must be a national subject, mounted on a machine produced in his own country and at least two classes of machines must be used. Great Britain has held this trophy for the four years previous, but now, after a lapse of two years, a Czechoslovakian team re-entered the fray to gain a well merited victory. Czech riders also wrestled the silver vase from Holland. This trophy is contested by teams of three nations, although there is no stipulation regarding capacity of the machines or origin of manufacturer. On this occasion, 19 such teams were entered, but not one finished unpenalized to gain a manufacturers' award. Team members in the foregoing competitions are given a speed schedule 10 percent in excess of that set for the respective capacity of the machine they are riding. More fortunate are the three riders from a club team, for they are only obliged to maintain the normal averages. Despite this, only three, all Germans, out of a total of 32, managed to complete the 1250 miles without a loss of marks.

The two days before the contest started were full ones for the organizers. Machines had to be checked, sealed and examined prior to be taken into their custody and safe keeping for the duration of the contest. Competitors have access to their mounts for the day's run only fifteen minutes before their actual time of departure in order to re-fuel or make any adjustments needed. Machines are even impounded during the hour allowed for the lunch break each day, thus a competitor who needs more time in which to make adjustments must of necessity, by faster



German Zundapp sidecar teams seem temporarily distracted. One of the teams fell into a canyon, was disqualified for accepting help



Austria's W. Kramer pilots a 250 cc TF Puch through a dry "wild-water" bed just after leaving the fourth-class road visible in rear



Spectators and markers pointed the way. Factory riders are given a handicap of 10% increase in required speed over individual entrants



Jubilant Czech Trophy team, L. to R: Pudil, Kubes, Novotny, Kohlicek and Dusil. When they had learned of the other country's losses, these boys slowed their pace, stuck as close together as possible, sacrificed speed for safety and rode as one, being careful not to lose a single man

riding, make up a few minutes between the check control points of each day's route. Finesse of riding technique does not enter into the event and riders may cover the route in whatever fashion they choose providing that they arrive at each control point on time. Outside assistance, however, means instant disqualification.

Individual riders, including those making up a team in any inter-team contest ride against the clock in the hope of gaining one of the much coveted ISDT Gold Medals. To accomplish this, a rider must cover the full distance without the loss of a single mark. Oddly enough, despite the casualties among the various teams, no less than 84 individual Gold's were gained by masterful riding. A loss of up to 10 points gain a Silver medal, for an accumulation of up to forty more points a Bronze. At the conclusion of the week's grind, 27 riders gained the former and 26 the lesser Bronze. Considering the wet weather that played havoc with ignition components and systems, the total number of awards gained was amazing.

Condensation, a bugbear at all times, is a perfect brute to an ignition circuit when one must kick a machine into life within three minutes or lose just one important mark that would forfeit a gold medal. Bear in mind also that if the time already lost in coaxing a stubborn motor to fire must be made up before the first check point for fear of the loss of even more vital marks. One point being forfeited for each minute late at any check is enough to cause any rider to throw caution to the wind, but, thankfully for the peace of mind of many, time lost between any two points cannot be made up between two others. Luck does, in a way, play a great part in the selection of teams.

for should one member of any team be forced to retire, that team forfeits its 100 points for each day of his retirement. In past years, it has been known for two or three countries to have two riders retire in Vase competition, one country more fortunate than the others, having the two retiring riders in one team, being placed in a commanding lead through lucky team selection.

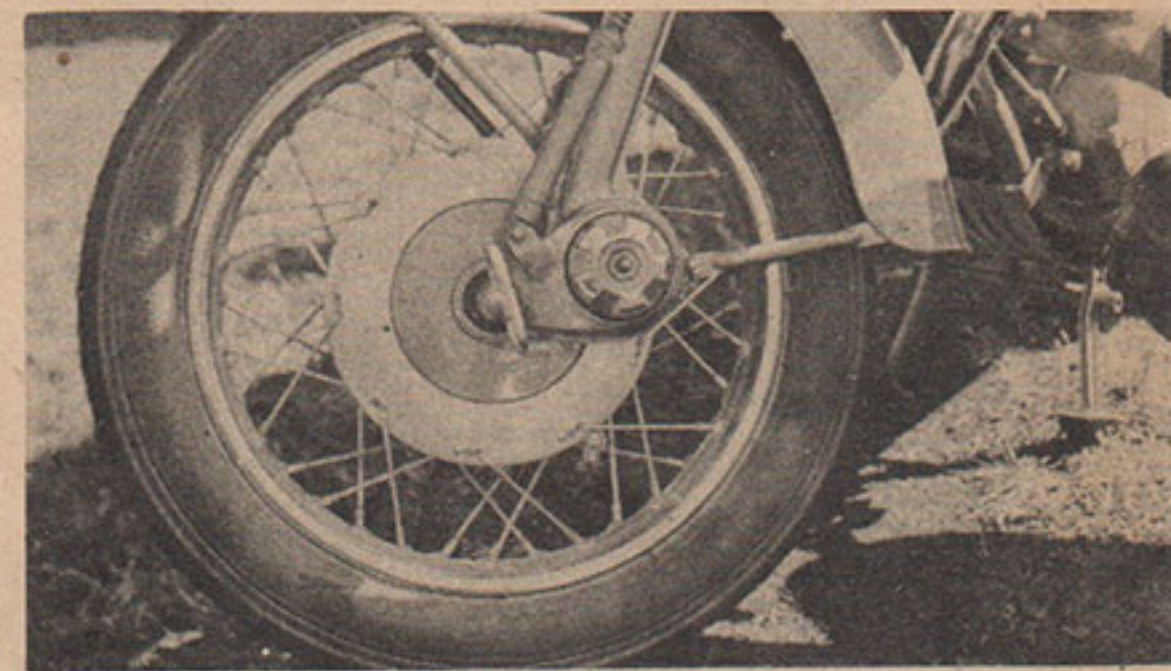
The first day's run of the 1952 competition spelled complete disaster to three Trophy teams before the 280 miles had been covered. Austria was most unlucky in this respect through a mixup at the gas station check. J. Kramer astride a gas-consuming 171 cc Puch was re-tanked with pure gas and seized solid in no time at all. Germany, too, were penalized a full 600 marks by what may well be deemed an outside incident. R. Dollmann collided with a stray dog and unfortunately damaged the machine, a 98 cc NSU, to an extent that prevented further forward motion. Italy forfeited the highest total of all during the opening run. Gearbox failure caused the retirement of D. Serafini (175 cc Guazzoni), and an additional 20 lost by N. Greico (148 cc Parilla) for lateness at a control. Sweden had forfeited 11 marks on time and the remaining two were unpenalized. Contrary to this, the more numerous Vase combinations remained intact, ten, in fact, being holders of clean sheets. Fourteen manufacturers' teams also still had hopes of an award.

The second day involved a daylight run of 166 miles followed by an additional 120 covered in darkness, wrought a complete change in the picture. Rain set in with vengeance. Roads, already slippery, became treacherous and muddy lanes that

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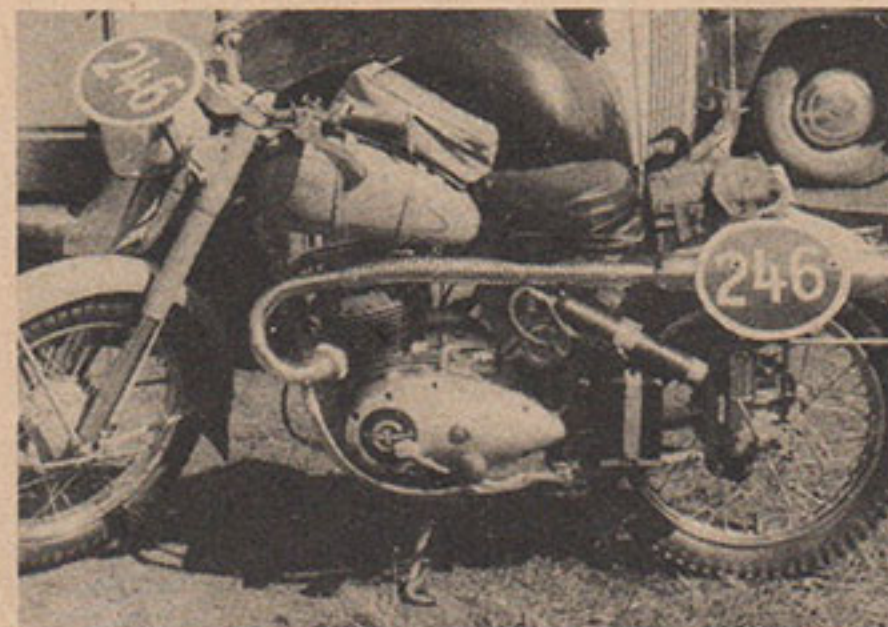
A pouring rain intensified the risk of crossing such crude bridges in the grizzly Austrian mountains. Germans installed snow chains on sidecars at the worst mud sections



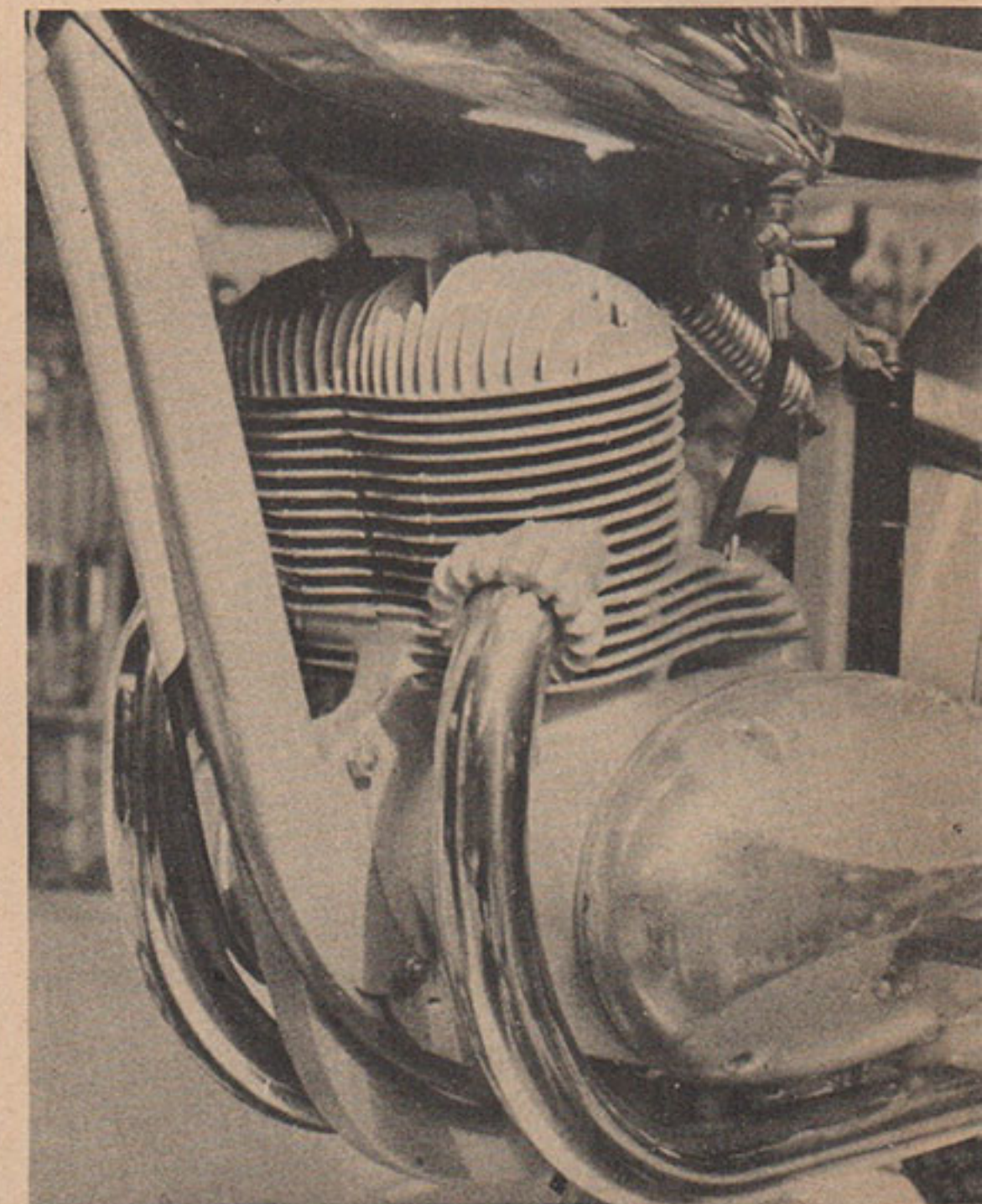
German Adler 198 cc vertical twin was boosted to 247 cc capacity for the ISDT so that it could compete in the 250 class. Front suspension incorporates a scissors-type band-shaped spring with a tiny but highly effective airplane-type shock absorber. Note quick-change front axle nut with handle, requiring no tool to unfasten. All three Adlers finished



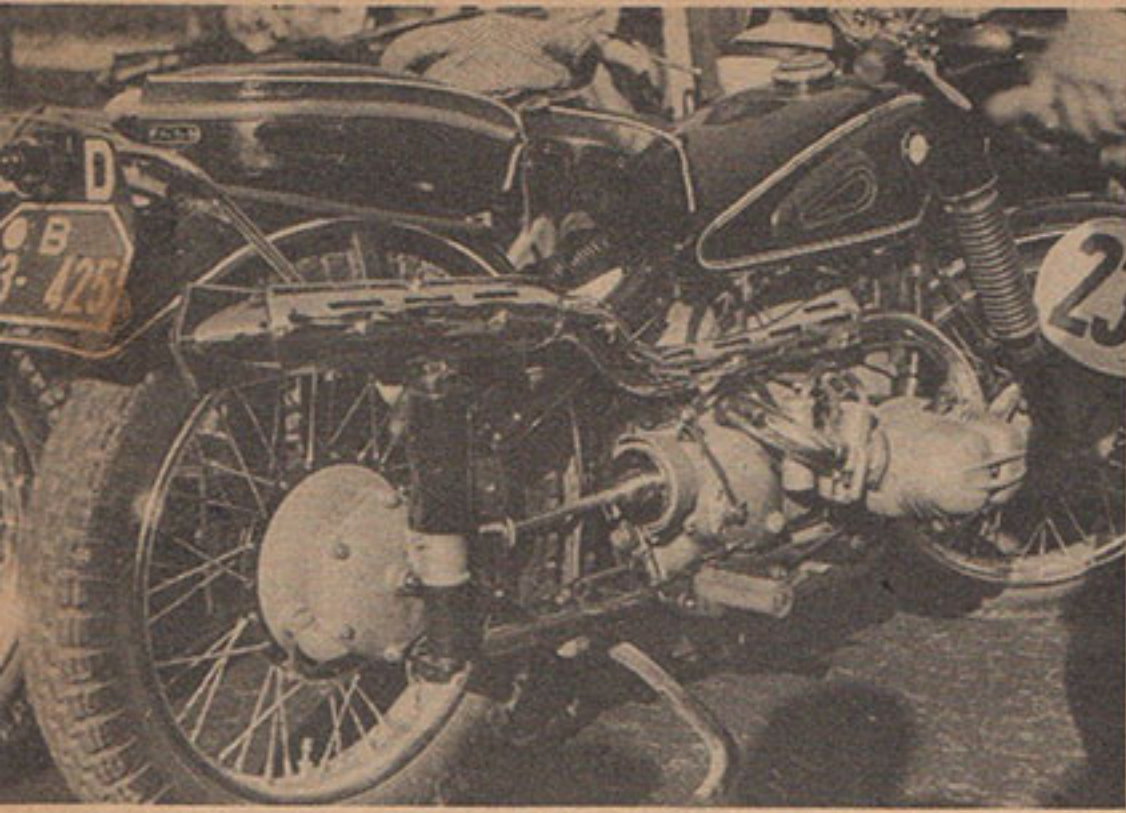
Trouble always lurks close by. 1952 trial was admittedly the hardest in 27-year history. Riders were plagued by miserable weather



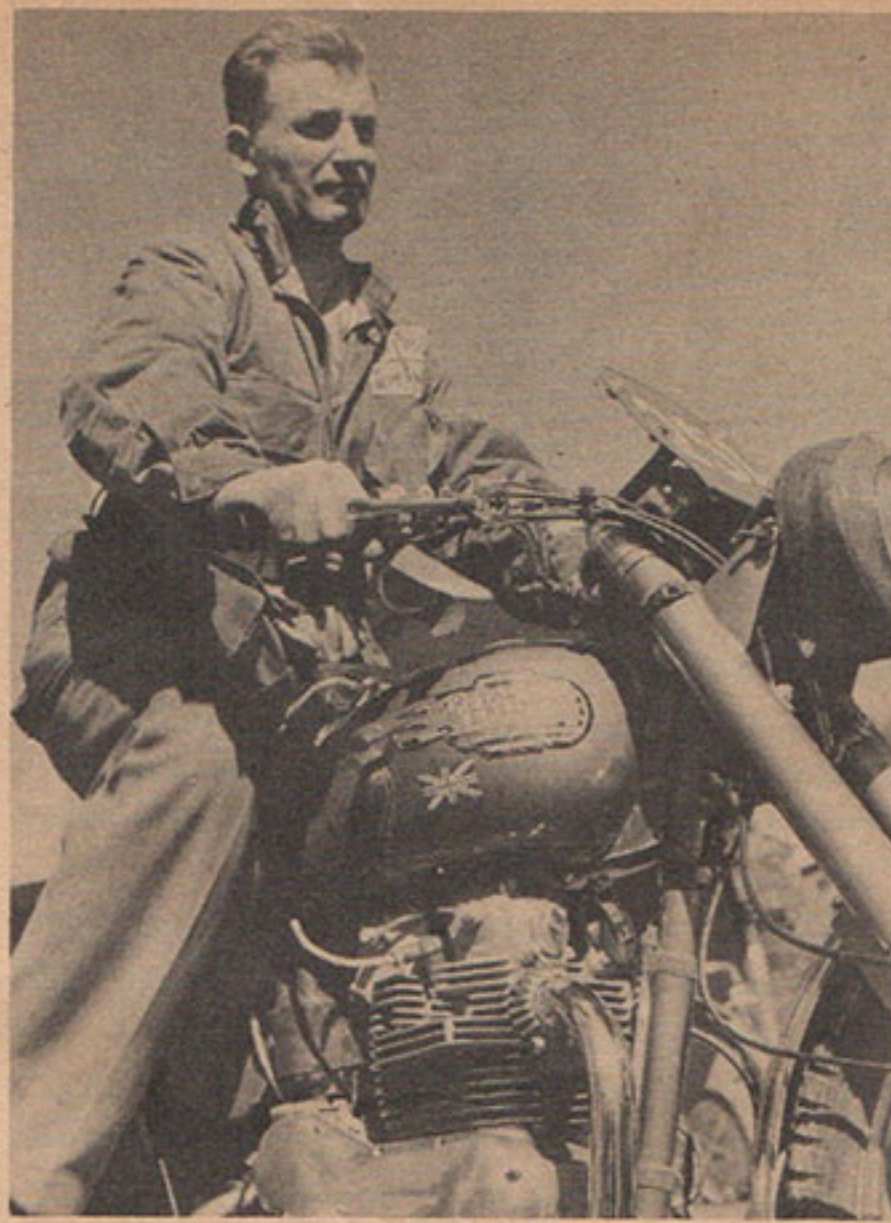
Swiss 350 cc Condor twin. Swiss have scored three wins between the wars; Britain, ten; Germany, four; Italy, two; Swedes & Czechs one



Victorious 250 cc Jawa twin. Seeing their chance for a win on the fourth day, the Czechs reduced speed, played close to the board



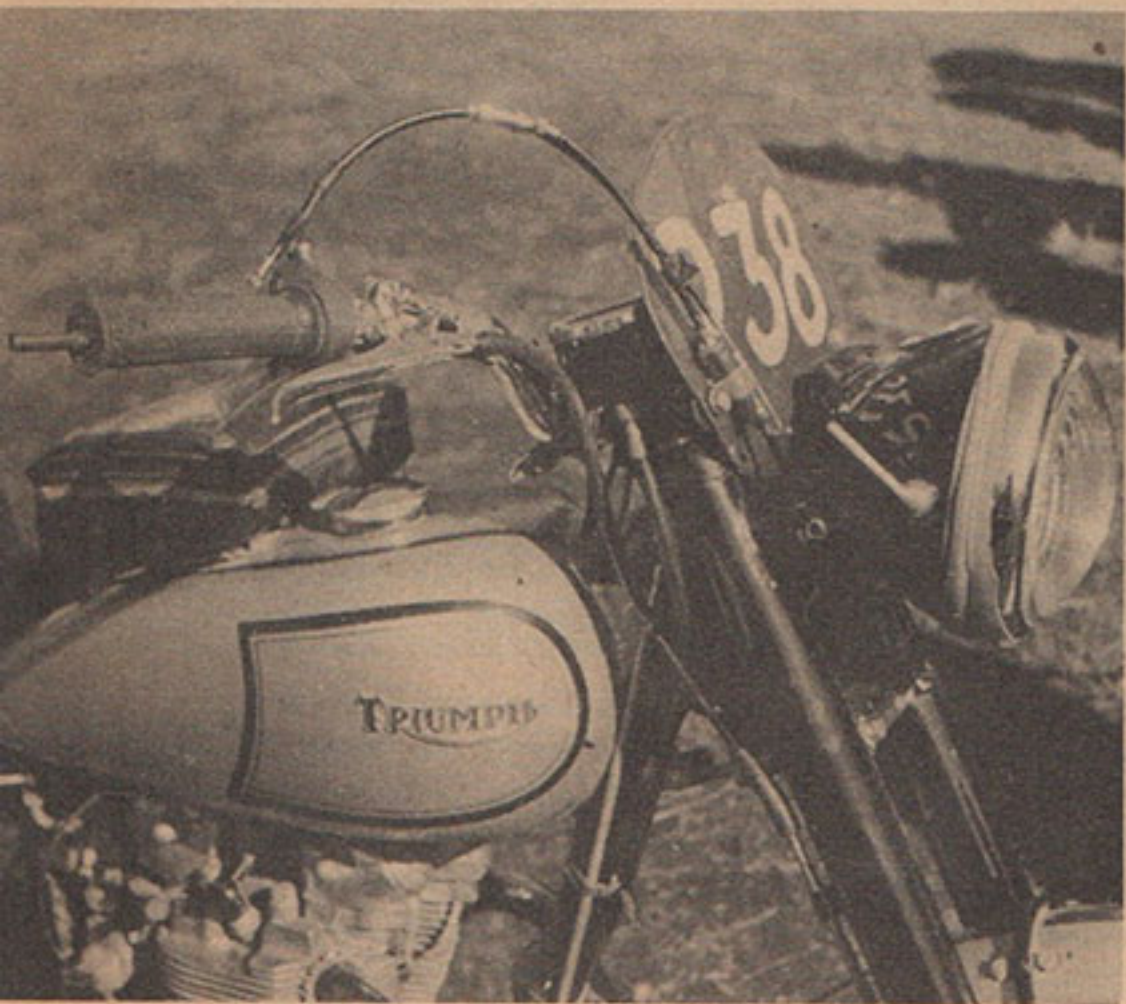
600 cc opposed BMW twin driven by Hans Roth, of the only German Vase Team. Wherever they were seen, the Germans' style was faultless, smooth and efficient. Up until the last day, the German Silver Vase team, still intact, was the only team with zero marks, then Roth broke an exhaust valve and couldn't start the speed test final. The remaining BMWs, however, set fastest speed of the trial at over 104 mph



Heaviest one man and machine was Jack Stocker and Royal Enfield. Over-all, the British displayed greater ability at getting through the tighter sections, were masters of body-English



Although an excellent rider, G. Parsons, on a 500 Ariel, cut many a caper on this greasy road. Miss Molly Briggs, British, ran a muddy hill in 5 minutes while some others took an hour



British Triumph of J. Giles, Trophy Team, fitted with dual throttle cables which are looped up out of the way to a junction box, just ahead of the number plate, where either cable may be immediately connected in case the other should break. Rubber bands around headlight are stored there, ready to be used for fastening tools or loose parts to cycle. FIM ruling permits use of dual tires on either end of bike providing width does not exceed 12 inches

turned into quagmires in a matter of minutes. The hopes held by Sweden were quickly dashed when a member of the Trophy team, C. Nehlin (123 cc NV), received head injuries when he skidded and crashed badly. Britain was put out of the running when Bob Manns (498 Matchless) found no sparks when he came out to begin his grind in the dark. He worked frantically, but to no avail and his retirement cost 500 marks. Condensation in the mag had cost several riders points at the start, but this time even greater toll had been taken by "The clerk of the weather."

The previous, all-complete Vase teams had less reason to crow. Four were now whittled down to two members and only five remained without a mark against them. It was the teams entered with such good faith by Europe's manufacturers that suffered mostly in this second day of defiance to nature; CZ, BMW and Triumph alone remaining in a position to gain an award.

Little change resulted at the conclusion of the third day's running of 263 miles. The Czech Trophy team lost a mere 2 points when R. Dusil rode into a control two minutes later than the allowed three. Even so Great Britain was 188 points be-

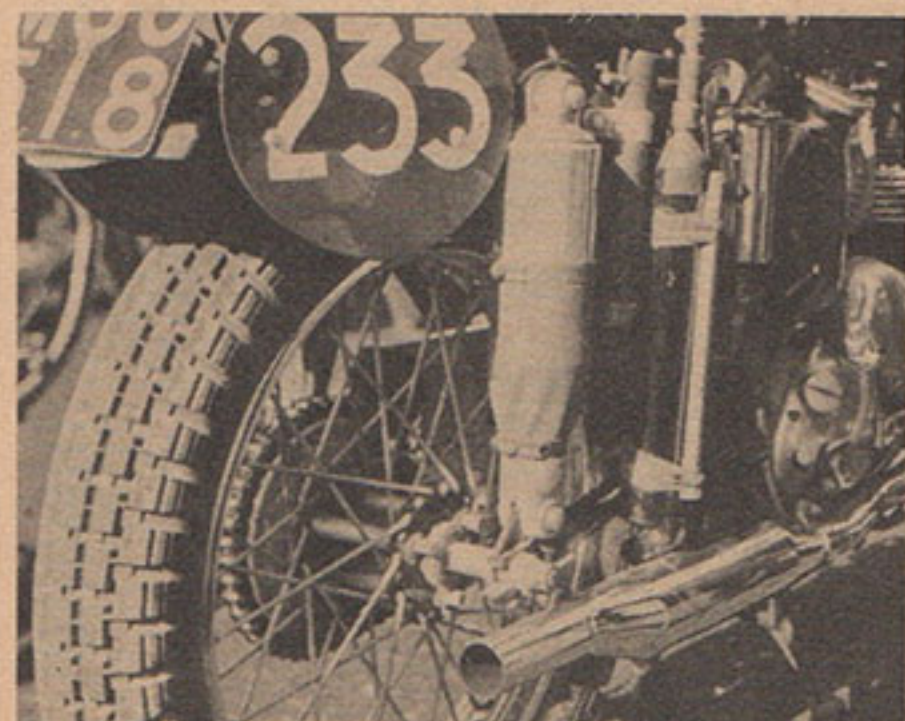
hind, yet holding second place. Italy had dropped from the running of the Vase when the Rumi ridden by G. Strada gave up the ghost. This left a three cornered fight between Germany, Holland and Great Britain.

The thermometer was well below freezing when the contestants set off over 274 miles of partly frozen roads, innumerable tracks and almost vertical climbs of the fourth day. Several failed to kick frozen motors into life in the permitted three minutes; some indeed, losing that coveted gold over this misfortune. Only by wholesale retirements could the gallant Czechs lose the trophy at this stage and the interest was transferred to the struggle for the Vase. Great Britain's hope slowly faded when the sliding gear seized on the Triumph Trophy model ridden by P. Hammond, for his forced retirement would lose that 100 marks each day till the end. Holland's team lost eight marks on time thus leaving the German team the only one clean. The three months which were spent at frequent intervals in the Austrian Alps by George Meier, Walter Zeller and Hans Roth, who usually perform on the race circuit, certainly paid a dividend to the Bayerische

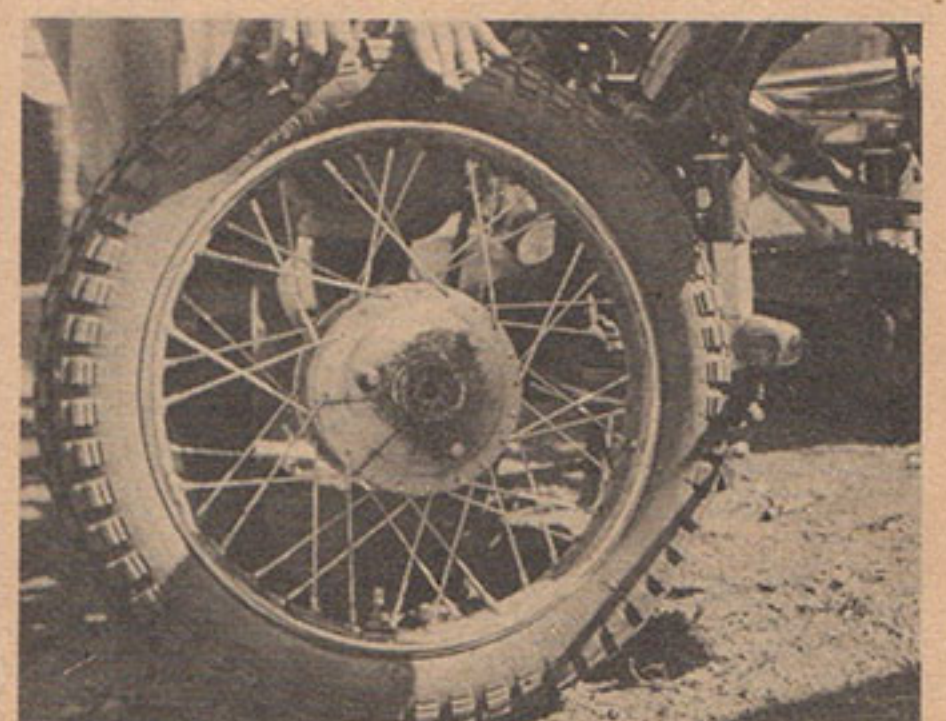
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Denzel, German BMW ace, and Mong, British BSA rider, fire up at the drop of the flag. 28 of the 43 individuals (not factory sponsored) finished the trial in search of a gold medal



Ajay twin shows particular attention to rear suspension cylinder, was neatly protected by section of bicycle tube secured with radiator clamps. Note compressed air bottle for tire flats

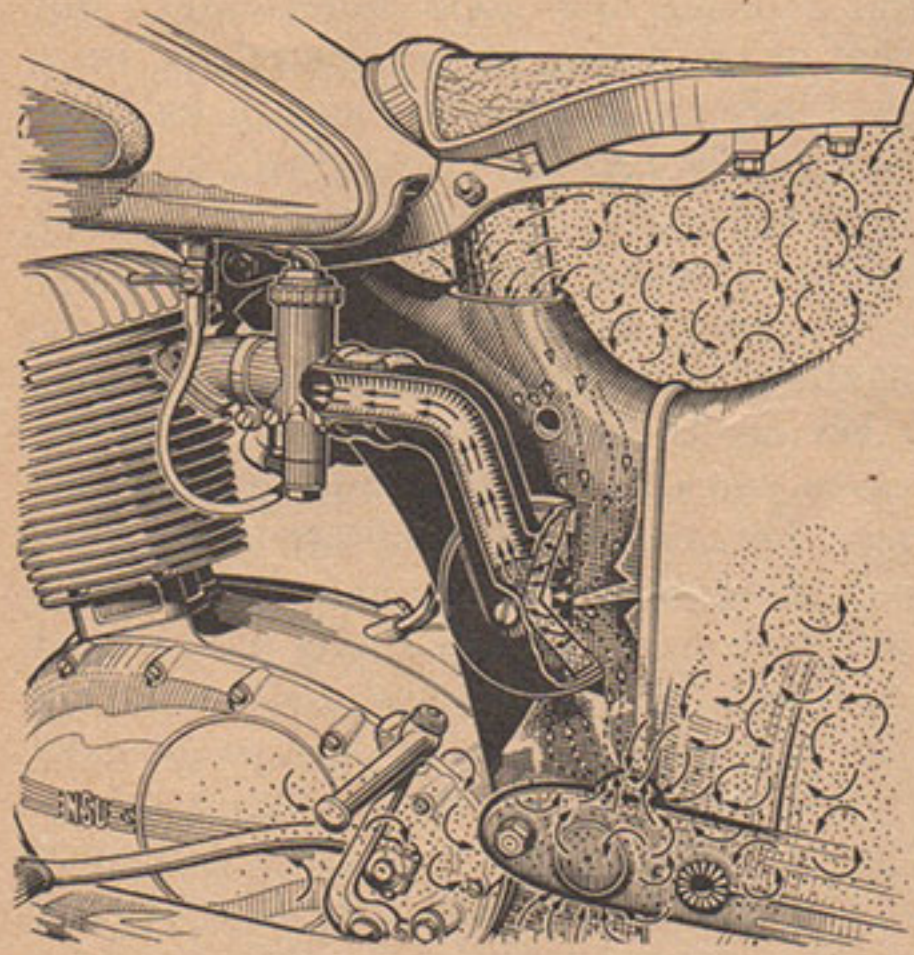


Dr. Czerny of Vienna, the only medic who participated, won a gold medal, displays the rear of his Horex. Pins in rear hub fit into rubber sockets in sprocket which act as shock-absorber

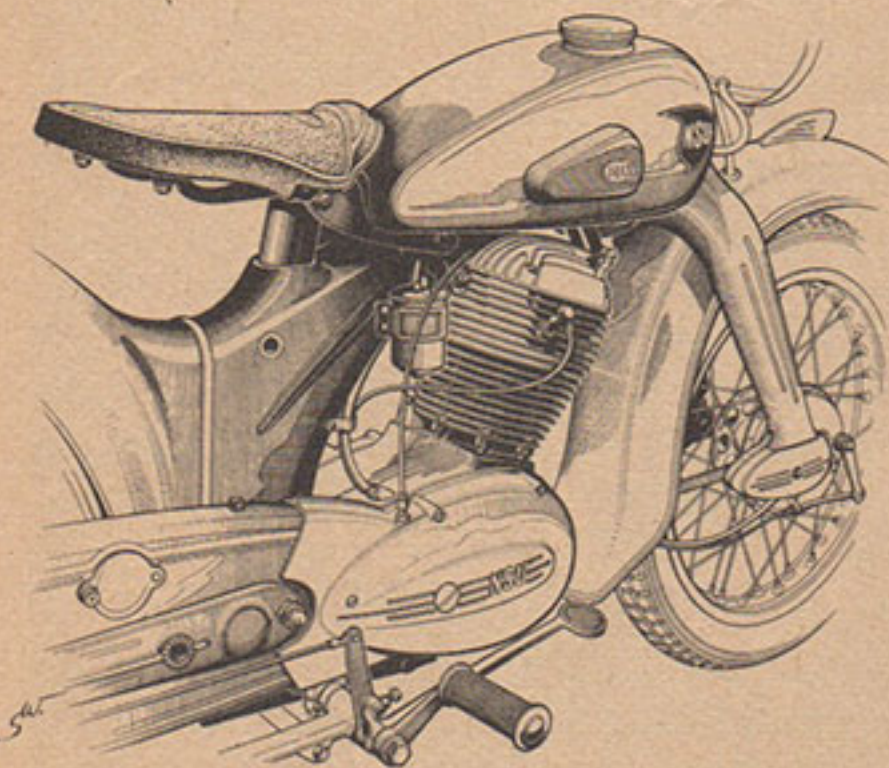
CLEAR THE TRACKS!

NSU adopts principles of locomotive in new "ultramax"

FOR A LONG TIME the overhead camshaft has been the mark of a powerful four-cycle engine, but even today OHC jobs are few. The evident advantages of the overhead camshaft, the smaller mass of moving parts of the valve train—either chain or shaft drive, have permitted safer and more accurate high revving but have apparently failed to reach the production machine because of several reasons. The shaft driven overhead camshaft demands expensive work from scratch, requires sensitive fitting up. Even if the unavoidable cylinder stretch from temperature fluctuations can be compensated somewhat by using bevelled gears or chain tensioners, the play in the driving teeth is still to be contended with and despite careful adjustment, the system is apt to become noisy with subsequent wear.



Turbulent and swift-moving intake air, containing dust particles, is drawn up through the large hollow section of the frame, where it is slowed down. Much of the dust is retained on the walls of the frame rather than being sucked into engine where it could damage the delicate parts



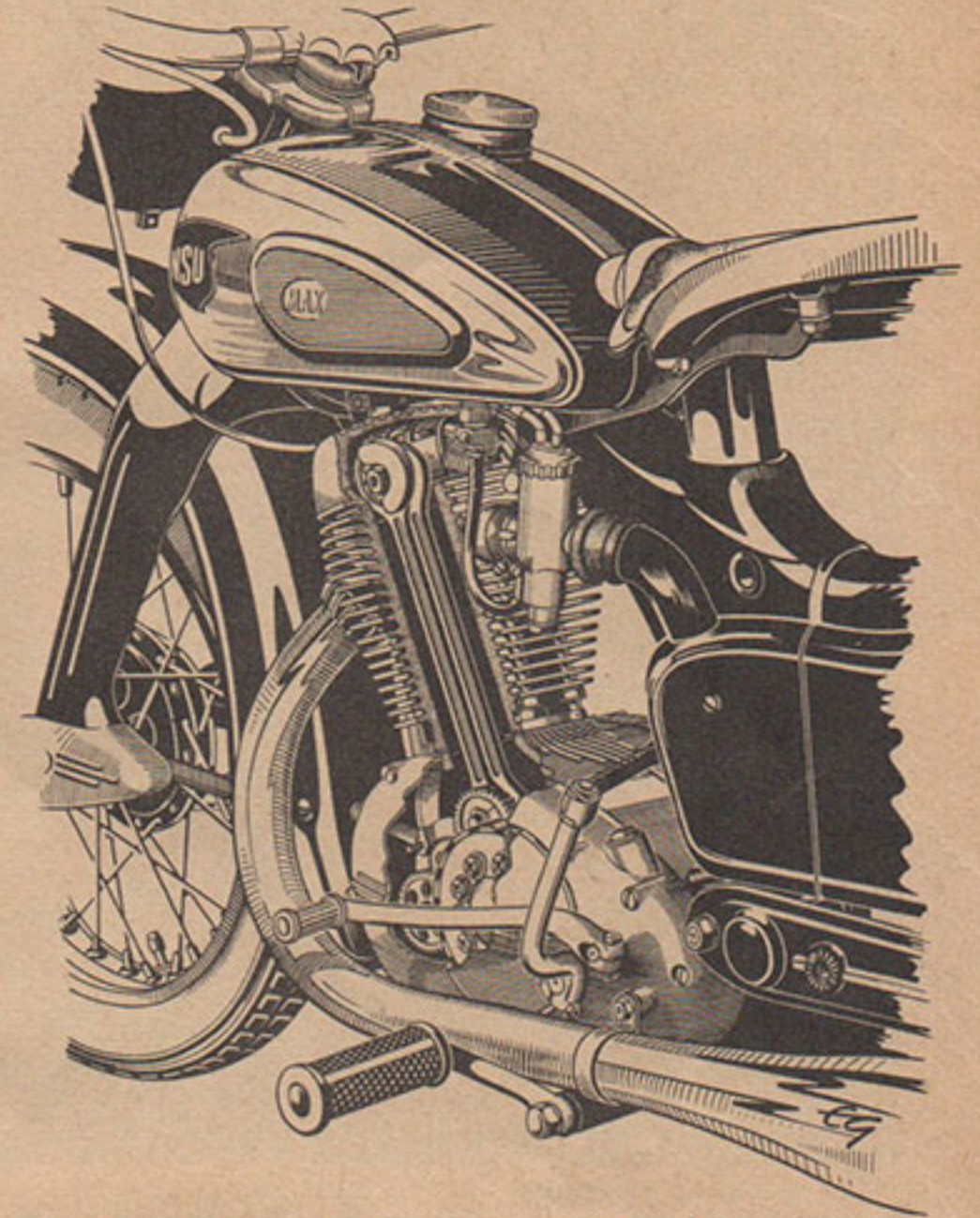
The German trend appears to be toward eventual enclosure of many of the mechanical or working parts. The NSU Ultramax, with its new system of overhead cam operation, puts out about 15 hp, which is terrific for a 15 cu. incher

Many of these problems are claimed to have been overcome by the NSU engineers in their latest achievement, the 250 cc (15 cu. in.) model MAX. Delving into the study of steam locomotion, the MAX makers took up where the locomotive engineers left off. This radically new application of the eccentric drive works from an auxiliary shaft, driven off the timing gear which reduces the speed of this shaft by one-half. The two driving rods, set off-center and 90 degrees apart, revolve on and are actuated by two cam discs (the cam action coming from the fact that the discs, which also act as bearing surfaces, are mounted off-center on the auxiliary shaft). The same principle applies at the upper end of the two rods which actuate the cam shaft and are counter-balanced. The weights are adjusted so that they contribute to the collected energy in overcoming the acceleration of the naturally uneven working cam drive.

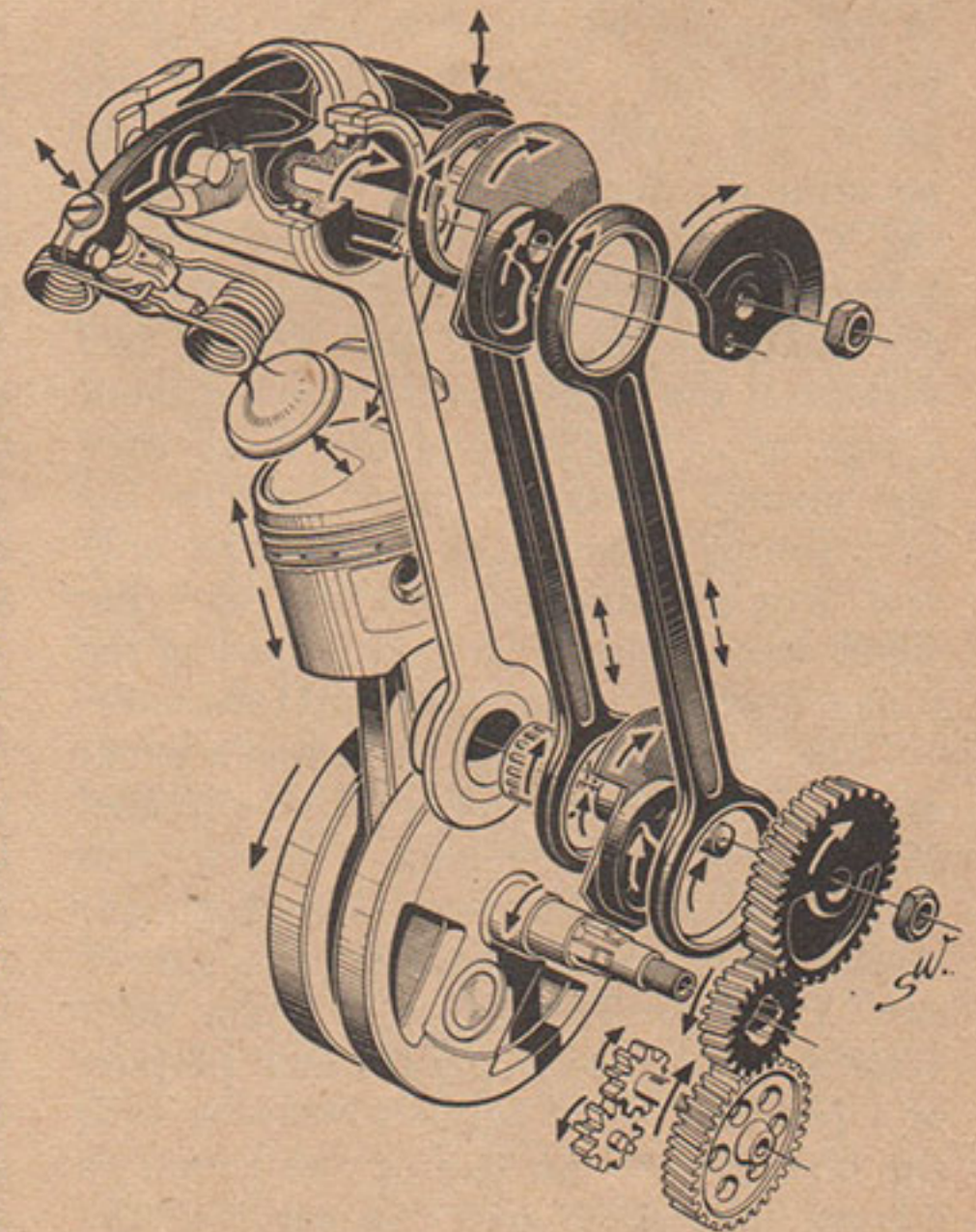
The biggest headache of the overhead cam system, that of heat stretch, was cleverly dealt with by a steel anchor (looking very much like the cam actuating rods) which is roller bearing mounted to the auxiliary shaft at the lower end and is integral with the overhead valve housing above. When temperatures rise and the hot cylinder tries to expand, this steel anchor clamps down, minimizing stretch and making for noiseless and accurate power transmission. It does, however, permit the valve house to turn a little. The whole unit is well lubricated and has small surface pressure, an advantage which promises long life and efficiency. The small amount of drag is especially noticeable at higher revolutions.

Another step forward in motorcycle progress is the system developed by NSU for calming down the carburetor air intake by an ingenious routing through an enlarged frame tube member. Scientific studies showed that dust, taken in through the carburetor, is a major factor in engine wear. In the MAX, the swirling, dust-filled air is drawn through a long enlarged passageway in the frame where the air is calmed and most of the foreign particles are settled on the inner walls. The air is then filtered before being sucked into the carburetor, thus greatly reducing wear on the inner polished surfaces.

Technical progress seems to run in leaps; the times of apparent standstill alternating with stormy advancement through creative endeavor. Thus, with the 15 hp, 70 mph MAX, successor to the 251 OSL model, it appears that NSU is making a strong bid for public favor, one that can hardly go unheeded in light of such progress.



Radical departure from conventional overhead cam operation has been developed by NSU engineers who took up where the locomotive technicians left off. Eccentric push-rod drive is said to be easier to assemble and maintain, as well as less expensive, quieter, and just as efficient as the conventional shaft drive. The Germans are pushing hard for new business



Arrows indicate direction of travel. Lower end of the overhead cam driving rods are mounted on a separate shaft which is gear-driven from the crankshaft at one-half the engine speed. Principle of system is identical to the driving mechanism on a locomotive

TRIUMPH TROPHY TEST

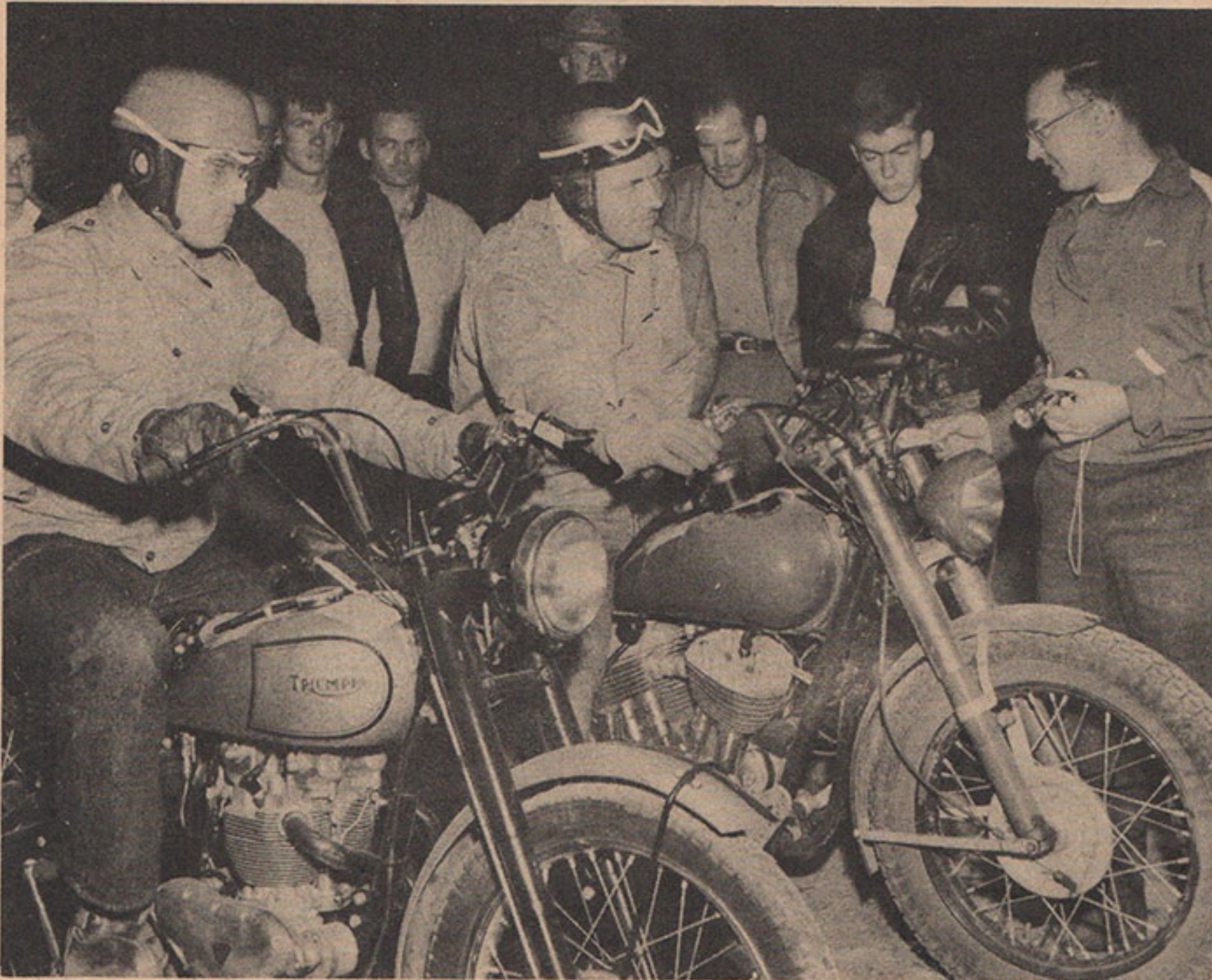
4000 MILES UNDER THE WHIP

Photo by Tommy Amer

Tough cross-country flogging proves staying power and handling ease of rugged trials twin

**BY BOB GREENE
EDITOR**

Photos by Jack Campbell

Ten seconds to go . . . then the Trophy was off on the final leg of its test, the Cactus Derby. Although short wheelbase and steep fork angle, purposely coupled for extreme maneuverability, were not the greatest for high speed over irregular ground, the Trophy is up to almost any beating and inspires confidence in the roughest terrain because of lightness, low speed torque

THE FRAME *must* be broken! In an instant I had bull-dogged the Trophy to a stop, resigned to the fact that the little twin had suffered mortal injuries from the sheer foot-and-a-half deep ditch it had just crashed at better than 35 mph. Part of the regular road test routine? Not on your life, bud . . . this little caper was not in the script, but there was the gully nevertheless, looking every bit as big as the Grand Canyon and me without a Democrat's chance of stopping. Wonder of wonders—somehow the frame had withstood the nightmarish impact without a sign of a fracture and the forks were but slightly tweaked, a good pull on the bars setting them right again. The only real damage suffered was by the rim, which was slightly flattened (exposing the tube), and two spokes that had torn loose.

California desert-land served as a backdrop for this happy scene (I was tickled to be able to ride away) about two months prior to this year's Greenhorn Endurance Run. Your road test machine, a new Triumph Trophy 30.50 cubic inch vertical twin, was serving the dual purpose of a test bike while actually working with the lay-out crew on one of the country's biggest enduros. It had just survived the most brutal impact we had ever experienced on a road test, intentional or otherwise. The vicious hazard was actually a double one, one of those rare natural "set-ups" that takes you off guard then leaves you helpless except to relax and enjoy it.

Riding in a strung-out group, we had been hitting about 50 mph across this perfectly straight dirt powerline road for mile after mile, unaware that for no rhyme or reason nature had cut two water-filled ditches across it (drain-off from nearby mountains). About 6 feet across and 1½ feet deep, the cuts were over 100 yards apart and only visible from 30 yards away. Although the first ditch took all of us by surprise, hard braking and an assortment of individual wing-dings saved the day. Not suspecting that still another pitfall awaited only yards away, we all took off at a ginger clip down what we were still convinced was a good desert road. Just as the Trophy was popped into third gear, the second ugly washout jumped into view. The brakes were hit hard again, but this time with no effect—the bike sailed on almost as if the throttle had been pulled on instead of the brakes, which had been rendered useless by the water at the first crossing. Fortunately, two very important facts, one good, the other bad, had been learned at comparatively little expense. While both frame and forks proved to be a glutton for punishment, the binders, although perfect in their normal operation, do wet out at the first sign of water, and in a hurry too. The wheels had been in the water for only a fraction of a second and the brakes had gone completely out. Of course it's only a temporary condition, but in this instance the time element was all-important.

So began round one. A staggering uppercut had failed to flatten the short-coupled, quick-handling little 295-pounder that still forced a highly favorable report several months and 4000 miles later. But what of the nature of this specialized British Trials model that has such a habit of consistently turning in a perfect score at the exacting International Six Day Trials? Briefly, its basic design is founded on low-speed maneuverability and torque, a combination of handling characteristics that either sends you into a fit of praise or leaves you colder than a well-digger's *derrière*. Fortunately, the unprecedented time and subsequent mileage piled up in this test gave a chance to dwell on each of the bike's little quirks and it's safe to say that whatever may have been overlooked in this report is hardly of major consequence. But, before we start swinging, let's predicate the whole test, its praise and its slams, on one fact—that you're a "30-inch" man. If you can't stand to have your cork pulled coming out of the corners, you may as well jump to page 22, but if you get your kicks in the middle of a slide or picking a path over a rock-strewn goat trail, then read on, we may have called your number. While qualifying the Trophy as a strict sporting machine rather than a highway vehicle, I would like to point out one exception: because of its easy starting nature, fine handling, economy and low speed torque, it should double as an excellent "shagging" bike. The same features that make it a stand-out in the backwoods, apply in downtown traffic—but, back to nature.

THE TROPHY'S BIGGEST FOE

Since the start of this test, the Trophy has been entered in two endurance runs; Sierra Trails and Cactus Derby, covered hundreds of miles of trail-blazing and finally run on the pilot team of the three-day Greenhorn Run. The machine failed to finish the Sierra Trails because of a stuck throttle slide, but atoned some-

what by placing high in the Derby. All of which brings up a subject that, in my mind, is the Trophy's biggest foe: The difficulty of getting it to breathe properly through the present air cleaner and induction tube set-up. From the first day, the engine had trouble breathing through the standard cleaner and no amount of jet juggling could bring the carburetion in right at high rpms. The problem actually appeared twofold. Because of the proximity of the seat post tube of the frame to the carburetor, it is necessary to offset the air cleaner from the carburetor mouth. This means that the rubber tube joining the two must have quite a bend in it, and it is this bend which seems to do its share towards disrupting the flow of air over the main jet, thereby starving it out. With the air cleaner hose disconnected, the engine ran clean at any speed. Hooking it back up meant a 20 to 30 mph drop in speed. Thinking at first that the trouble might be elsewhere, the mag was removed and tested, but gave a perfect reading so was re-installed. In desperation, the air cleaner box was opened up, a large door cut in one side and covered over with wire screen to allow more air to enter. The complete inside baffles were removed and a coating of grease was smeared inside the now hollow box to serve as a trap for dirt particles that passed through the screen.

This was the way things stood as the bike was wheeled up to the starting line of the Sierra Trails Enduro at Fresno, California. Although an excellent run (one that I am surprised more riders do not enter), it is always a dusty ride in spots and, at about the half-way mark, the Trophy's throttle began to stick open. All attempts to free it were in vain until, after about a 20-minute stop, hot oil dipped from the tank with a stick into the top of the float chamber finally began to free the slide. As it turned out, a complete dismantling job would have been as quick. The gutted cleaner wasn't the answer, for although it did not restrict engine breathing, neither did it restrict the dirt.

In the Cactus Derby the cleaner was removed completely and the bike finished the run without a stutter. While the practice of running in cross-country events without a cleaner is a deadly one, engine-wise, the Trophy used less than a half quart of oil during the Derby and still shows no signs of smoking or pre-ignition. The only solution to Triumph's Trophy air cleaner problem would seem to be in the adoption of the seat post tube "eye" that is featured in all of the other Triumph frames. This hole in the vertical frame member, behind the carburetor, permits a straight induction tube which offers no restriction to the fast-moving air.

Now here's the pay-off . . . really one for the books! After all this strain, it was decided to put a stock cleaner back on with the faint hope that the intervening 4000 mile loosening up period would have affected at least some small improvement. Well, the rest is strictly "Scout's honor," for strange as it may seem, the Trophy took off like an express train, couldn't be made to drop a beat at full revs in the lower gears and just plain ran beautifully throughout the entire power range with the stock air cleaner hooked up and a number 150 carburetor jet installed. The symptoms of starving out that had been experienced at the start of the test had completely disappeared and I'm stuck for an answer—anyone want a road tester's job? The object lesson here, of course, would seem to be: Let the Trophy get a few thousand miles on before giving up hope on the air cleaner situation.

IT TAKES A LITTLE PATIENCE

Whether you choose the Trophy for sports riding or about town use (it's terrific in a sea of automobiles, but not advised for long distance trips), its first feel will draw your immediate comment. You'll discover there is such a thing as a square corner—you've just invented it. After all, it isn't everyone that can drive into his garage, weave between the kid's toys, an odd barrel or two, squeeze by the

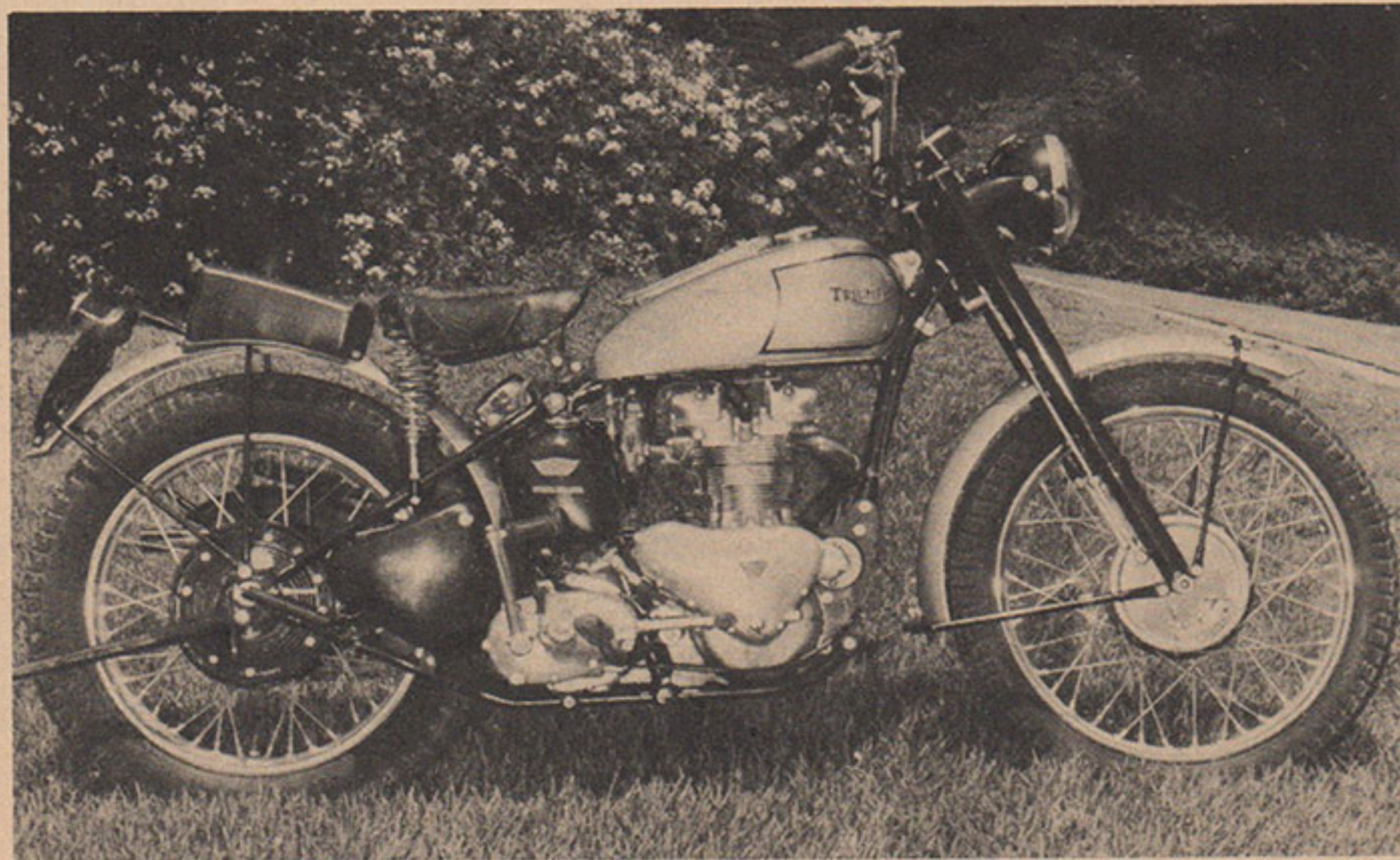
front of the car, turn and ride back out again without even touching a foot down! Yes, the steep fork angle and acute turning radius of this fancy stepper lets you get by with murder in close quarters. It's a big thrill until the first time you try to push the little feist through a series of soft, deep dirt corners or up a long sand wash. Chances are, you'll stand off and scream, "I just can't ride that thing in sand!" Don't you believe it—the Trophy can cut the deep stuff (without installing a Thunderbird steering head), once the rider learns to sit well back, gripping the tank firmly with his knees and taking as much arm pressure as possible off the bars. If normal weight is carried on the bars, the slightest whip of the sensitive front wheel (3.00 x 20 inch tire) is magnified into real trouble. It takes a little patience to master the Trophy in sand, but it can be done, and satisfactorily too.

For extensive riding of this type, it is advisable to fit a slightly more radical rear tire. The standard Dunlop Universal is excellent for paved or dirt roads, but doesn't boot you along quite as well as the Dunlop "Trials" Universal when buzzing up a sand gully. Tight mountain maneuvers will come along rather easily once you've spent a few hours on this twin. Because of its shortness and consequent lack of trailing weight, coupled with its sensitive and quick steering, I found that rather than long, wide radius power slides, the Trophy encourages one to drive deep into the corner and flip it quickly into a sharp, last-minute brake slide, coming out as straight as possible with the power full on. You will probably find yourself falling into this pattern automatically, for the bike's extreme light weight inspires a personal assurance of mind over matter.

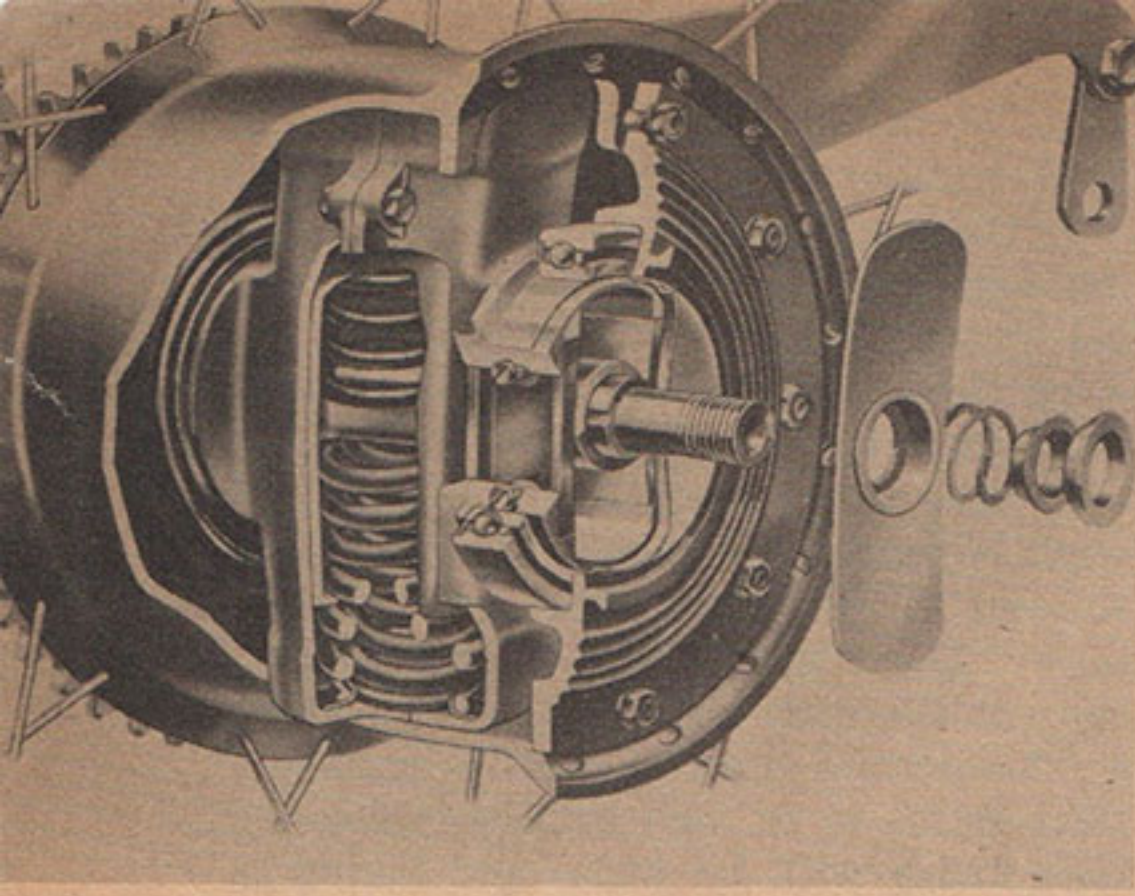
STEADY AT SPEED IF YOUR RIMS ARE ROUND

Before the little rim bashing set-to in the first paragraph, the Trophy was as steady at speed as a drunken brain surgeon, as true as they come at full throttle, without a sign of hop or bobble. However, since there was no occasion to run full tilt in fourth cog in the time between that incident and the top speed test, the warped wheel had only been hammered into shape, instead of being replaced as it should have been, and developed a violent case of hiccups above 80 mph. An approximate 15 mph tail wind was blowing down the strip the day of the speed run and may possibly have boosted the fourth gear readings, but because of the Trophy's low all-around gearing, the difference is suspected as being very little over a calm day. It should be remembered, however, that all speed and acceleration figures were attained without the standard air cleaner since we were still using the butchered-up filter at that time. With the standard filter attached the bike should hit in the middle nineties. With a standard 5.24 to one gearing in high and 4.00 x 19 rear tire, the engine is turning approximately 6500 rpm, which figures out on paper at 100 mph even, so we were hitting pretty

(Continued on next page)



Trim and purposeful, Trophy's delicate profile is a mailed fist in disguise—it won't give up. Engine and transmission proved their stamina beyond a doubt. Eventual weakness developed in Lucas voltage regulator which caused two batteries to discharge. Tail light is illegal, headlight, average



Triumph's spring wheel is only unit of its kind. At the most, it offers a couple inches of travel, but latest Mark 2 model is practically infallible, needs attention only at 20,000 mile intervals. Normal rear tire punctures can be repaired without completely removing tire from rim (merely pulling tube out one side), otherwise rear chain must be broken to dismount wheel

close to right. The top Triumphs at Carrell Speedway are running between 8000 and 8500 in comparison. The Trophy is actually not in danger until it starts spinning 7200 rpm. Basically, it is the same engine as the Tiger twin; the biggest difference being the Tiger's 7.6 compression as compared to the Trophy's 6 to 1. The Tiger intake valve ports have a higher polish, but both have the big valves and 1-inch carburetors. The Trophy develops its 25 horsepower at 6000 rpm, whereas the Tiger puts out 32 at 6500.

Triumph's vertical twin design cannot be dismissed lightly, for, being pioneers in the side-by-side layout, they have only had to slightly modify their design since its inception 15 years ago. One of the Triumph's most admirable features is its small oil loss. An inherent trait of this twin is that even when badly worn, it's easy on oil. The heart of its lubricating system is a dual plunger, heavy duty oil pump that pressures the oil directly into the crankshaft, then through the rod bearing oil passages from where it is thrown off onto the cylinder walls as it seeps past the bearing. Falling back into the sump at the base of the engine, it is filtered before being pumped back to the tank, where it must pass yet another filter. Not all of the oil reaches the tank, however, for a bypass feed running from the return side of the oil pump line routes another circuit of oil to the top end of the engine, lubricating the overhead valve gear. This oil then drains down the push rod cover tubes over the tappet and cam lobes again to the sump in the base of the engine. An interesting feature at this point is the fact that both lobes of each cam (the hollow intake cam which serves as a timed mechanical breather, crosses directly at the rear of the engine while the separate exhaust cam is located in a similar position in front of the engine) are located directly in the path of the flywheel splash, thereby receiving additional lubrication. Yet another advantage of this camshaft layout is the fact that the intake and exhaust cams are on separate shafts, making it possible to more accurately time either cam since

each can be set independently of the other, especially in view of the three keyways that are broached into each cam gear, permitting finer cam setting.

Triumph's three-piece crankshaft makes it possible to replace any single part of the unit accurately and easily. Special ground steel alloy bolts align the component parts so precisely that no truing up is necessary after assembly. As a result of the bolt-up construction of this particular crankshaft, a natural dirt trap is formed in the wide cut-out in the center of the flywheel where each side of the crankshaft bolts on. As the pressurized oil is forced through the drilled crankshaft to feed the rod bearings, it must pass through this cavity and, as it does, centrifugal force of the spinning flywheel pulls the heavier particles of dirt or other foreign elements hard against the outside wall of the pocket, trapping them for good. Almost any Triumph twin that is torn down after considerable mileage will show a heavy collection of dirt around the inside perimeter of the flywheel cut-out. Connecting rods have been increased in strength and are now the same as used in the Triumph Thunderbird. On the bottom end of the heavy duty alloy rod is a babbitt-lined steel cap, while the metal of the rod itself serves as a bearing surface for the upper half. A bronze bushing carries the piston and wrist-pin at the top of the rod. New motors are fitted with a beveled oil ring that takes care of the break-in period when over oiling troubles are usually such a bother. As the engine wears in, the slight bevel on the ring disappears and the ring assumes a normal shape and function. The right side of the crankshaft is carried on roller bearings, while ball bearings support the left. Since the moving parts of the engine are cloaked entirely in aluminum (base, cylinder and head), it follows that excellent heat dissipation and lightness of weight are of equal importance to the beauty of the solid white metal exterior.

SMOOTH DELIVERY TO REAR WHEEL

Just as a chain is only as strong as its weakest link, so is any engine only as efficient as the gearbox which transmits its power to the rear wheel. In this instance, both transmission and clutch were beyond reproach over the 4000-mile test. On at least two known occasions, when the bike was loaned out for a demonstration ride, accidental back-shifts into second gear from third were made at speed with no apparent damage to the box. The gears, carried in the same weight oil as the engine uses, are of the same heft as those used in the Thunderbird. Although this sliding gear transmission, designed and built by Triumph, is not of the very latest constant mesh type, there is little room for improvement on this score. Termed a "wide ratio" box because of the greater spread between low and high, all gears are lower than the standard Triumph. Actually the jump between low, second and third is about the same, with the smallest variation by far being from third to fourth, but, since first and second gears

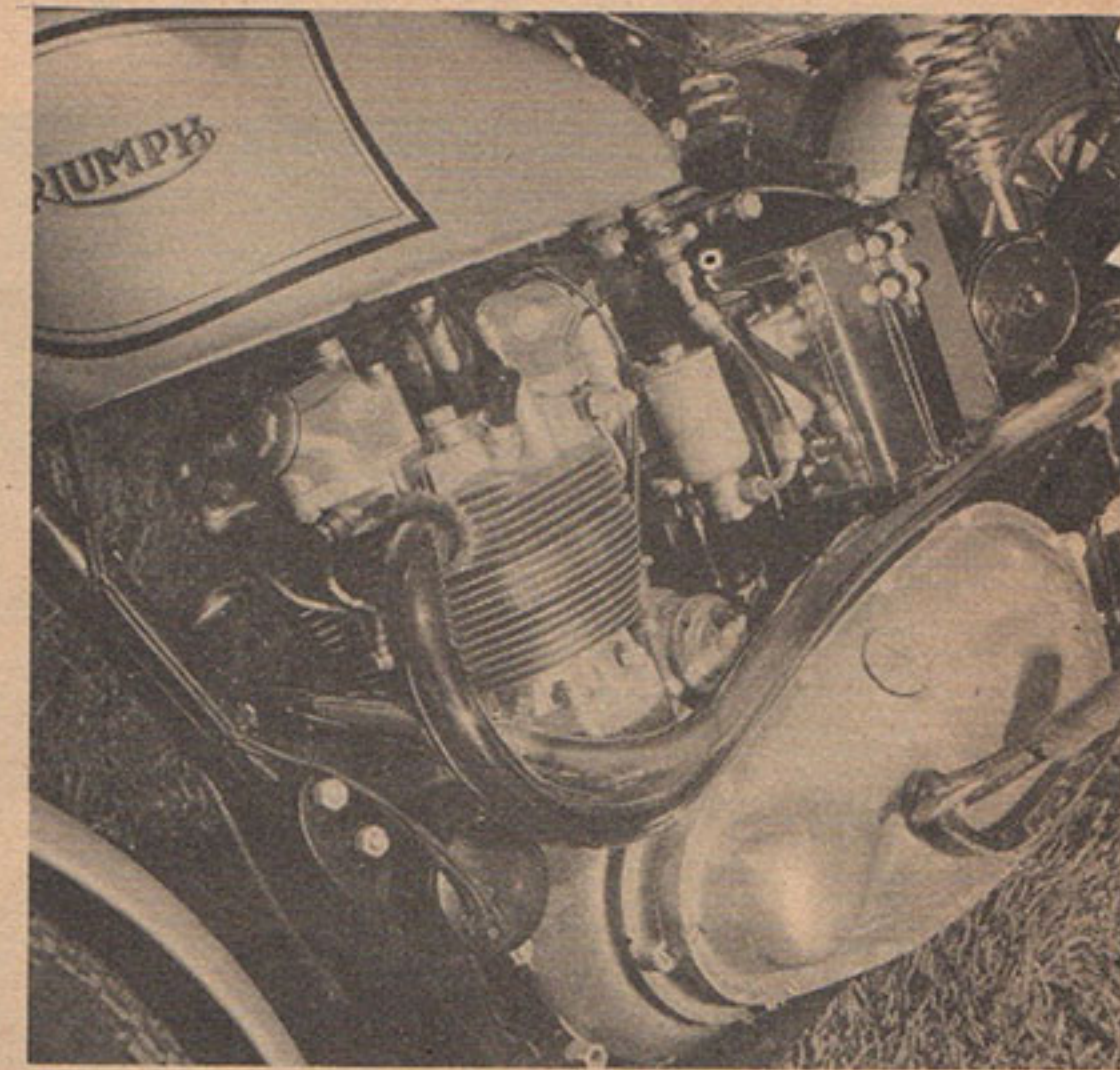
are so low, the change from one to the other is the smoothest transfer of all. Movement of the foot shift lever is short, effortless and silent. The change into third and fourth gear, however, requires slightly more travel and is definitely audible unless a short pause is made before engagement.

It is advisable to free the clutch plates by kicking the starter pedal through once with clutch disengaged before actually starting a cold engine. If this rule is followed, low can usually be entered without clashing when starting a machine that has set for any length of time. The clutch showed no tendency to swell, burn or slip at any time and received no adjustment other than the regular removal of play at the handlebar lever throughout the test which included several trips over a little mound of rock and dirt outside of Barstow, California, that this year's Greenhorn Enduro riders tagged "Impossible Hill." Triumph's cork clutch runs open within the primary case, receiving partial oil spray from this source.

An outstanding feature of the case is the built-in rear chain oiler that automatically lubricates for the life of the rear chain. The oiler is adjustable from the outside of the case by a small screw valve located at the rear and makes it unnecessary to ever again worry about a dry rear chain. The chain on this machine has never been touched, except for two adjustments, has no tight spots and keeps the rear wheel remarkably clean. It has been my experience that, contrary to manufacturers' wishes, if a chain is kept well lubricated at all times, there is no need to remove it for the thorough cleaning and re-oiling ritual. The dirt will throw itself off if, as in this case, there is ample oil. The rear chain oiler is a *must* that surprisingly few bikes are equipped with.

RIDING POSITION AND COMFORT

Although the rear hub and front fork springs are of standard tension, we could



Beautifully matched cross-overs are tucked in close to engine and under battery case, completely out of way. Tubing is smaller diameter than normally used for better exhaust draft at lower rpms. Both fuel lines are new transparent material. Air cleaner is difficult to service, requires removal of battery, brackets and wiring

find no reason for the extreme stiffness of the seat springs. While the firm location of the seat at low speeds might be called an aid to maneuverability, spring action was generally too quick and sharp. A set of longer, barrel-shaped Mustang springs increased the travel and cushion of the seat immeasurably, while still remaining surprisingly free from side play. This alteration is all-important for extended cross-country travel. The original fork coils were also replaced with Triumph's newer and heavier all-purpose springs, which are working out beautifully, having just the right amount of travel and tension. The fork seals showed a tendency to leak from the very start and they, too, had to eventually be replaced. Contrary to the test on the Triumph Tiger, the hub in this bike could only be made to bottom in extreme cases and, on a normal wash-board dirt road, had surprising flexibility. While the short wheelbase prevents the bike from riding with the same comfort as standard touring machines, I would say the suspension is near adequate for the use it is put to, it being necessary only to ride just a little slower than the boys with the longer wheelbase, deep suspension jobs over rough, straight-open-ground territory. This conclusion is based on the fact that very little fatigue was felt after riding pilot team on the three-day Greenhorn Enduro. Because of the extensive alloy construction, the machine is light enough that it can be manhandled with very little effort. This weight difference is so notice-

able that other bikes of equivalent size and power feel heavy by comparison.

In relation to riding position, the most notable improvement over standard was made when the original short Trials handlebars were replaced with the Hellings 7/8 in. diameter U2 high bars. The original bars were fine when riding over a hard surface or picking slowly over irregular ground, but caused the rider to lean too far forward, placing too much weight on the bars in sandy going or on down-hill jumps. The high bars were also more comfortable for long hours in the saddle.

After only a day in the backwoods, the foot pegs had been pinned back up close to the machine by jutting rocks, so at the first opportunity they were removed, straightened and had an inch and a quarter cut out of their middle; the peg tips then being rewelded to the cut ends. The overall length of the foot pegs is now just over three inches and they are well out of the way from any rocky protrusions. On a word of advice from many Trophy owners, the left front corner of the brake pedal was cut off at a 45 degree angle, for it seems that with a hard fall the square brake pedal often digs into the ground, tearing the complete brake arm from its mounting on the frame. The narrow gas tank and saddle offers less bulk to straddle, but because of the lack of area on the face of the saddle, the rider often finds the steel ridge at its rear anything but comfortable, there being great room for improvement here.



Popular narrow tank aids riding position, still holds 3.3 gallons. Parcel grid is mighty handy for strapping on jackets, maps, etc. Headlight has master plug, is quickly detachable. Vertical twin engine (that sounds like a little Austin car) seeped oil at first, was later buttoned up good and tight with new set of gaskets, ran clean

Small diameter cross-over exhaust pipes are so neatly swept in against the primary case and beneath the battery that the rider's legs never come in contact with or are anywhere near them. These, like all foot controls, side stand, etc., are tucked well up out of the way so that he who plans to do extensive cross-country riding need make practically no alterations to
(Continued on page 39)

PERFORMANCE SUMMARY

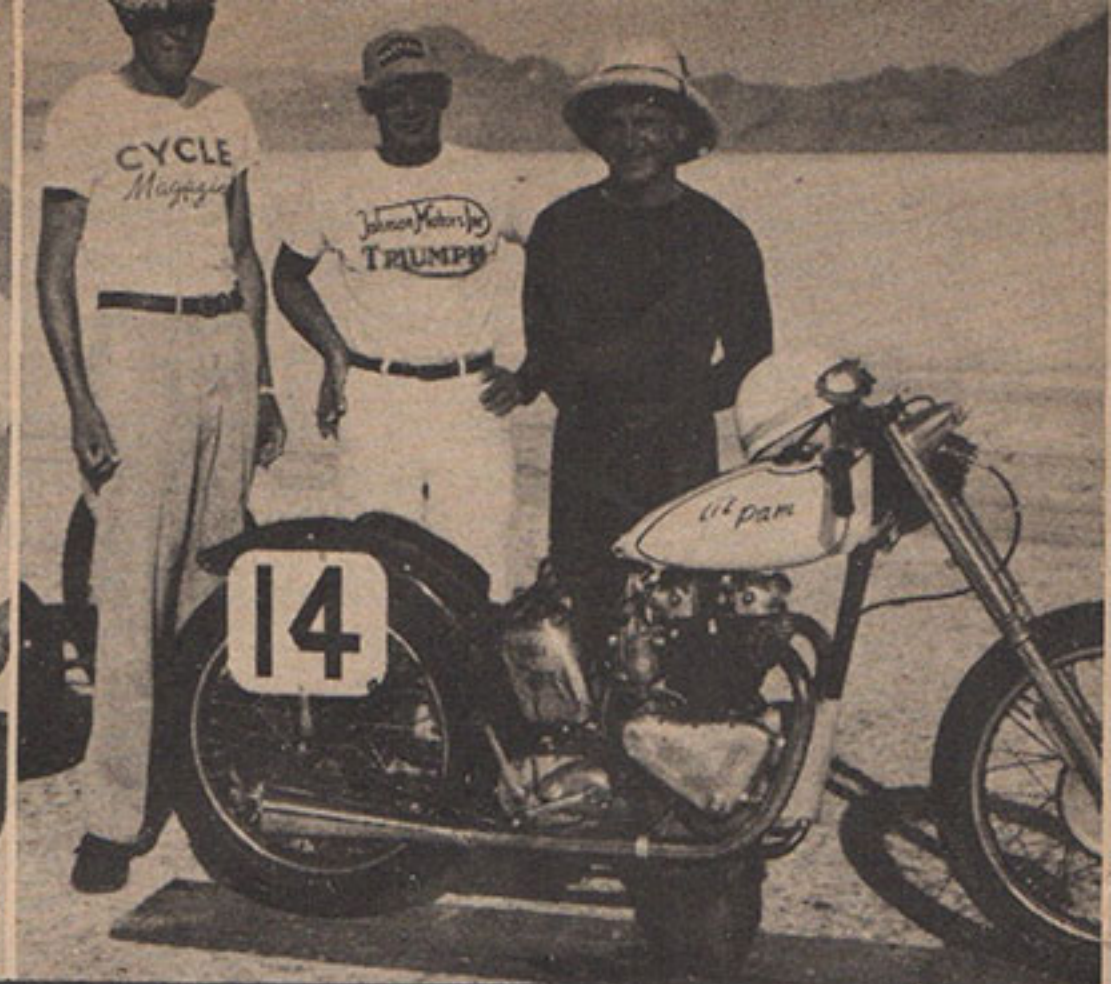
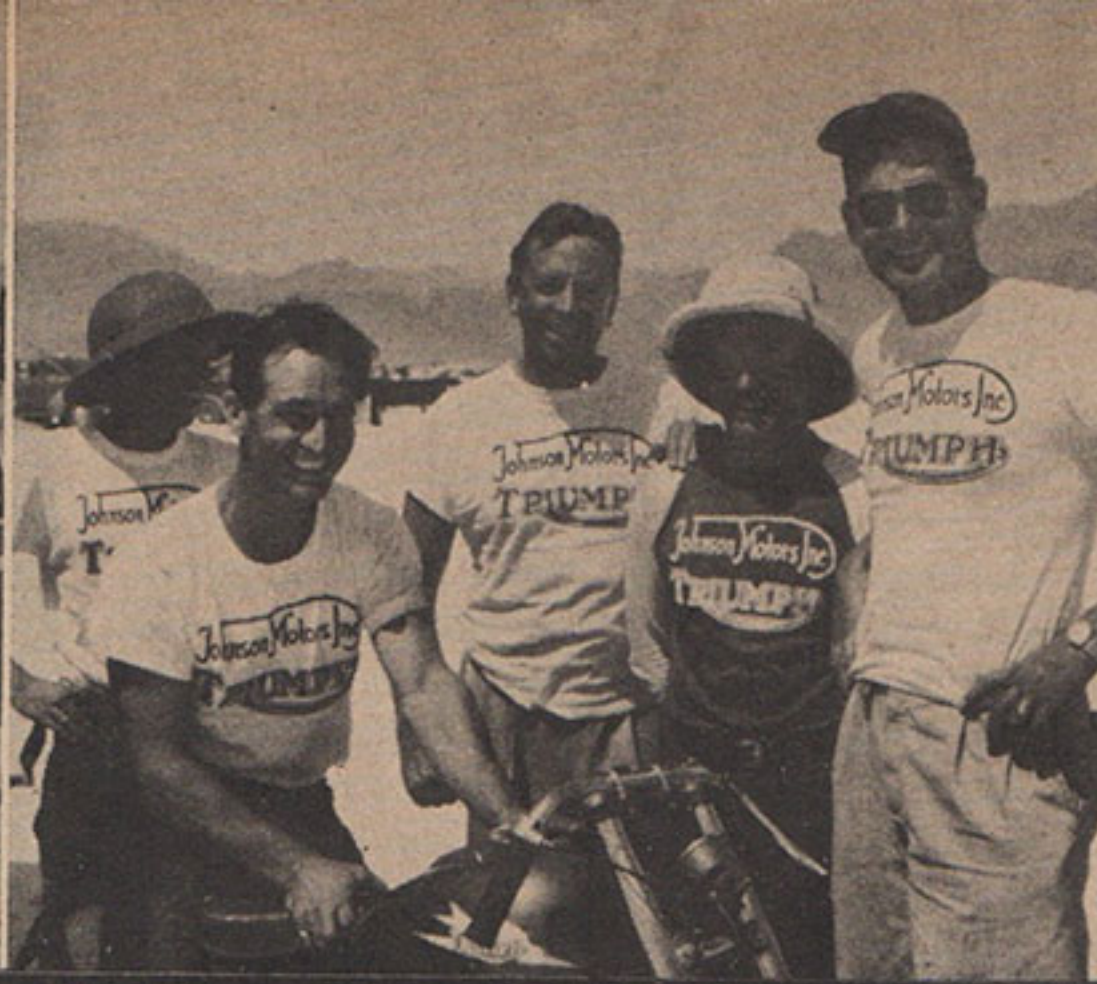
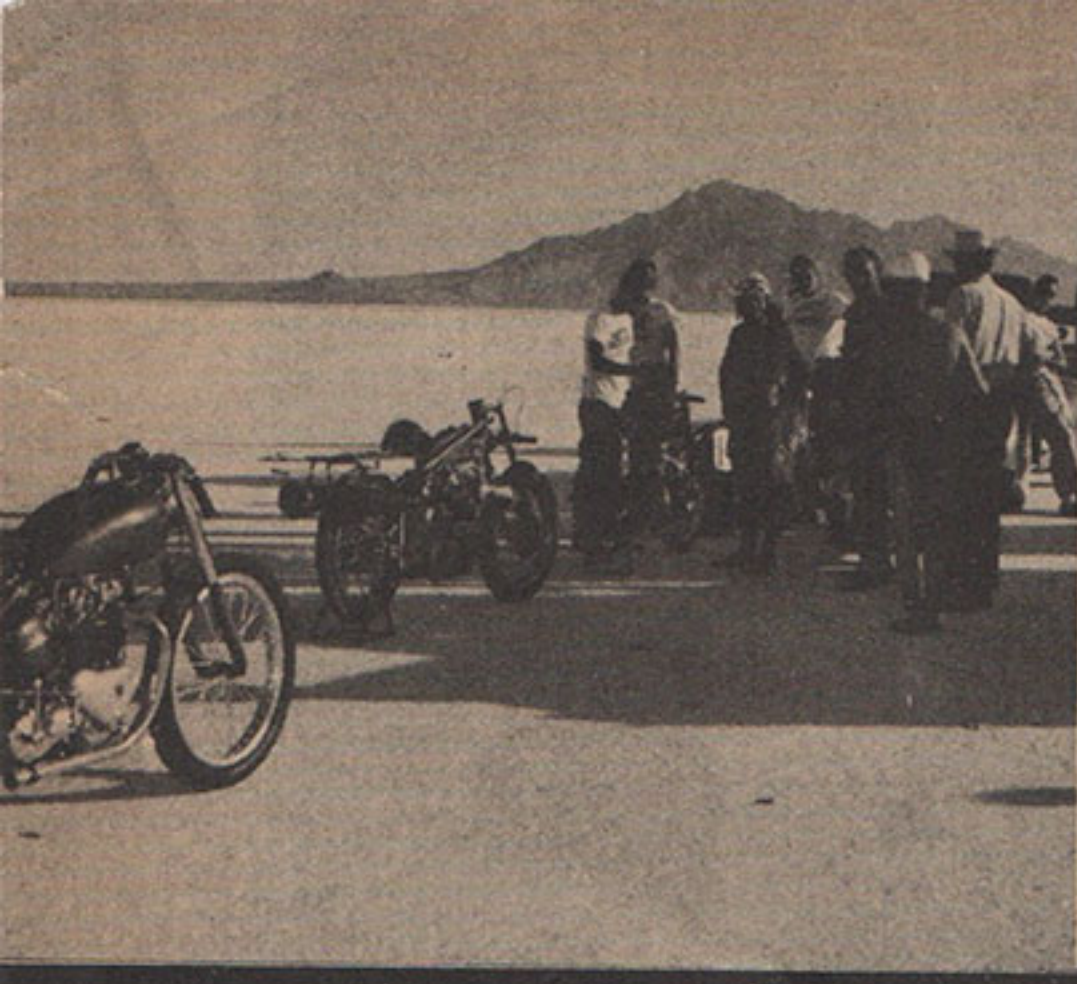
Acceleration*		Mileage		Turning Circle	
1/10 mile drag (8.5 sec.)	42.3 mph	General	51 mpg	Minimum diameter	10'
1/4 mile drag (15 sec.)	60 mph			Braking	
Slow Running		Speed*		From 25 to stopped,	
High gear without snatch	16 mph	Maximum in low	40 mph	rear brake only	39' 3/4"
* All speed and acceleration runs made without standard air cleaner. Mild tail wind prevailing.		Maximum in second	52 mph	From 25 to stopped,	
		Maximum in third	80 mph	front brake only	24' 7"
		Maximum in high	99.1 mph	From 25 to stopped, both brakes	17' 7"
		* (with tail wind)			

GENERAL SPECIFICATIONS

ENGINE. 30.397 cu. in. (498 cc) vertical twin OHV design; 2.48 in. bore X 3.15 stroke (63 mm X 80 mm); compression ratio 6:1. Engine develops 25 bhp at 6000 rpm. Totally enclosed valve gear with positive lubrication, twin gear driven camshafts. Rigid crankcase of high tensile aluminum. "H" section connecting rods with plain big-ends; crankshaft mounted on ball and roller bearings with center flywheel. Oil pressure indicator button on timing cover. Gear driven magneto and separate generator. Cylinder head and barrel are all alloy, die cast and with smooth, close pitch finning. 21 tooth engine sprocket.
CLUTCH. Heavy duty five-plate, running in oil spray; cork inserts. Handlebar control.
DRIVE. 1/2 in. X .305 in. front in oil bath. 5/8 in. X 3/8 in. rear. Positively lubricated and protected on both runs.
TRANSMISSION. Four speed foot control box shifts down for low. Gear ratios: low—15.25, second—11.58, third—7.46, high—5.24. Large diameter shafts and gear (same size as Thunderbird) of hardened nickel-chrome steel. Sliding gear type.
LUBRICATION. Dry sump type with high capacity plunger pumps giving positive feed to big ends and valve gear.
IGNITION. High efficiency B.T.H. racing mag.

ELECTRICAL. Lucas 6 volt, 60 watt generator (with full ball-bearing armature) and voltage regulator. Headlight is connected with main socket plug, quickly detachable for competition. Electric vibrator horn.
FRAME. Two-piece, brazed full cradle type with large diameter single front down tube.
EXHAUST. Small diameter twin headers with cross-over connection on left side, all chrome of highest quality.
FORK. Tubular telescopic type with 6 inches of hydraulically dampened coil spring movement.
REAR SUSPENSION. Triumph patented spring hub; 2-inch travel, minimum unsprung weight and constant chain tension. No provisions for greasing since spring unit is fully loaded with sufficient grease for 20,000 miles. No maintenance problem.
HANDLEBARS. Low Trials type fitted. Hellings U2 or Flanders H bar advised for anything aside from Trials riding. Quick action throttle with tension adjustment. Left bar carries clutch lever, ignition control, dimmer switch and kill button. Right bar: throttle, front brake lever, horn button and choke lever.
TANKS. Narrow diameter gas tank; capacity 3.3 gallons. Oil tank capacity 6 pints.
FENDERS. Narrow, aluminum alloy, bobbed style with small diameter tubular braces.

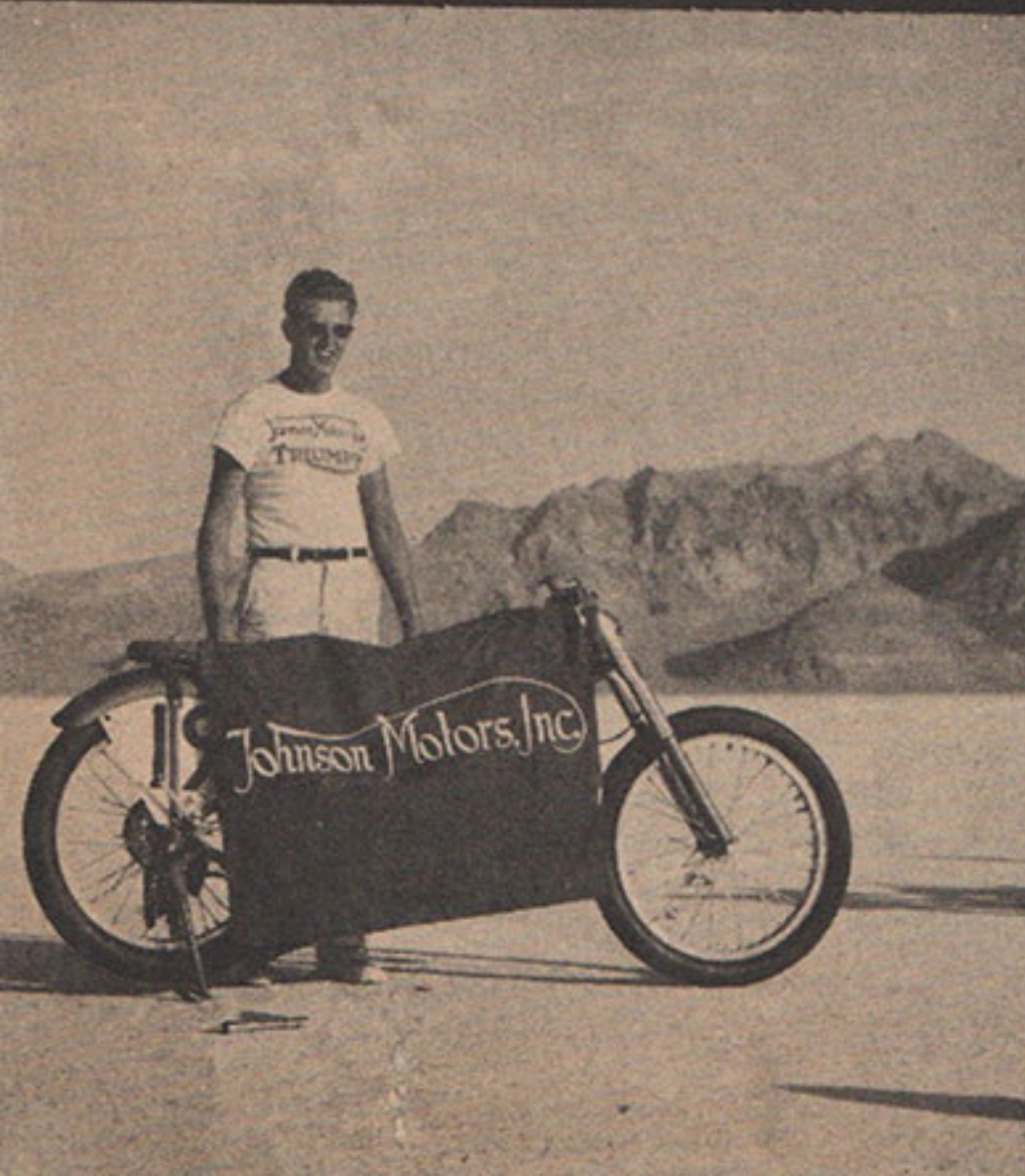
SADDLE. Small leatherette covered Lycette make; coil springs supported over wedge-shaped steel frame, mounted on straight coil seat springs.
BRAKES. Cast iron drum in front, finest quality linings. Finger adjustments back and front. Polished front brake anchor plate. 8 in. rear, 7 in. front.
WHEELS AND TIRES. Triumph design chromed wheels with heavy duty cadmium plated spokes. Dunlop Universals front, 3.00 X 20, and rear, 4.00 X 19.
STARTER. Folding kick pedal on right side.
EQUIPMENT. Generous triangular tool box on right side with complete set of tools. Rear wheel stand and kick stand. Smiths speedometer with total mileage and trip set mileage. Tire pump, air cleaner, horn, parcel grid on gas tank and front fender insignia plate.
FINISH. Fenders and tank, silver lined in dark blue stripe. Black frame, forks, oil tank, tool box and headlight. All major accessories chrome plated.
WEIGHT. 295 pounds, dry.
WHEELBASE. 53 inches.
OVERALL LENGTH. 80 inches.
OVERALL WIDTH. 29 inches
GROUND CLEARANCE. 6 1/2 inches.
SADDLE HEIGHT. 31 inches.



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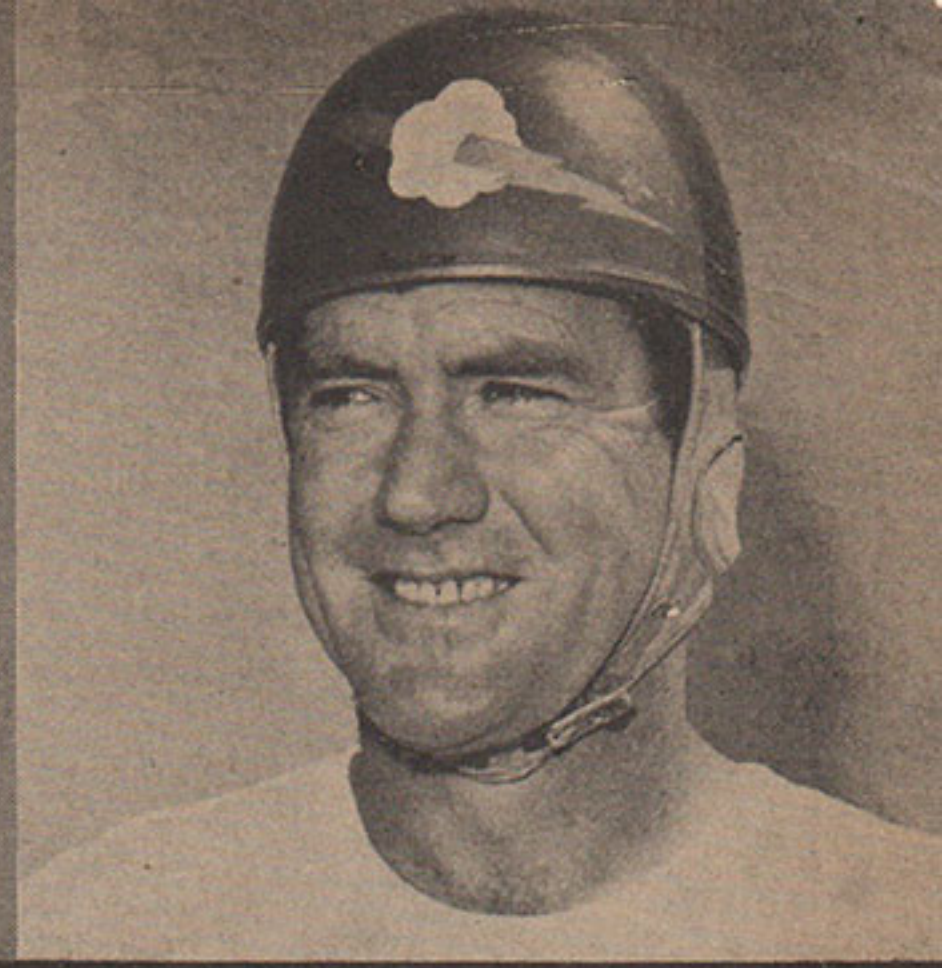


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The YANKS ARE COMING!



What would you do? Out of the rugged Piute mountains swooped Nicholson; his frame dragging the ground. He still had to cross the floor of the vast Mojave . . . without a rear tire! Could he hang on, 'til the finish line at Red Mountain? Nick not only could, but did . . . two minutes later!



Is Nicholson the man to drive America's opening wedge in European road racing?

By Jim Earp

FOR SOME REASON, American motorcycle racing can seldom draw a real crowd. Hot rods, jalopies, sport cars, stock cars, horses and dogs can pull in paying race fans by the drove. Motorcycle racers starve to death. A successful promoter once told us that he, personally, could race toads and draw more people than the best motorcycle show in the United States.

Yet, in Europe, motorcycling holds an honored position as one of the greatest of all sports. Thousands of hysterical fans line the Grand Prix courses each year in fair weather or foul. The backing given by the public to any racing event is fantastic by American standards. In Italy, for instance, when a race course crosses a railroad track, it is common for the trains to stop and wait for the contestants to roar across the right of way. Passengers lean from the windows to wave and scream encouragement as the riders come into view.

For many years though, Americans have persistently turned up their noses at the cycle rider. The same general situation still exists today, but a few new condi-

tions make a change possible. Strange upsets have taken place in the motorcycle business since the war. The sales of cycles have increased tremendously, a new batch of riders has made a smashing appearance, and a great deal of emphasis has switched to light, very fast, easily maneuverable cycles.

Club activity has expanded and the staff of *CYCLE* magazine is constantly receiving letters from all over the country asking how to organize *new* clubs. As yet, no great change in the attitude of the general public is noticeable, but startling changes have taken place among motorcycle riders.

The eyes of American riders are focused on Europe.

In addition to our own systems of motorcycle competition, English trials and scrambles have exploded into popularity throughout the motorcycle fraternity, enduros and hare-and-hounds are booming, and American cyclists have been given a chance to prove that they are not at all timid about blasting full bore around a winding, rough, paved road circuit.

None of these new events detract one bit from the traditional American forms

of competition. Actually, by making motorcycling more varied so that a greater number of people can become interested in the sport, it *advertises* the old, accepted dirt tracks and speed trials.

Road racing, for example, can be a wonderful ice-breaker. It can place the sport of cycle racing before more people than any other brand of competition. District 37 has been fortunate in being able to startle the bejabbers out of thousands of people with just four events—two road races at Catalina island—the world famous vacation spot—and two pavement races at Torrey Pines.

The first Catalina Grand National race took place before literally thousands of tourists and residents who had never seen a cycle race before. Every motorcycle thrill possible was presented to them. The ten mile course took off along graded dirt roads, savagely ungraded dirt roads, simple foot paths and then wound through several miles of paved city streets. Some of the wildest, hairiest spills and broadslides on record took place on the dirt, while through the pavement stretches of the city, motorcycles wound themselves around trees, clattered against curbs,

and filled the air wondrously full of demolished hay bales.

One old-time Catalina resident, who knew the entire course like the palm of his hand, timed the fleet leader, Nick Nicholson, around the first lap. As Nick streaked past he looked up from his watch and said, "My God! It's impossible."

From that race on the riders made it "impossibler." Each race saw an improvement in speed and technique until, at the last Torrey Pines race, 28,000 spectators, who had come to watch sports cars, found themselves staring open mouthed while the now experienced hot shoe experts (who were featured in two events that day) took confidently to the pavement and chopped seconds off the fastest sports car lap time.

They looked very good, but we don't know how good. We have never had a chance to compare them with the European pavement racers. However, by this time next year, we may know something more on the subject.

An American sportsman—Captain William R. Thompson—is running a string of Featherbed Nortons in European road races, and he has offered one of the Nortons to Nick Nicholson if he will go to Europe and ride in the Grand Prix races next season—including the *Isle of Man*.

Nicholson wants to go. But he has just been married, has a good steady job, and it is risky to just drop everything for a trip to Europe. It will cost him about \$1000 just to get there and live during the month of practice before the first race. From then on, he would have to live on his cut of the appearance money and prizes.

And how much could even the best American pavement road racer win against experienced European cyclists who have been studying the Grand Prix courses for years? Captain Thompson believes that Nick can place somewhere in the first ten in each race except the *Isle of Man*. So do we. But we will never know unless he goes over there and tries.

II

It is difficult to conceive of any American with a better background for Grand Prix racing. Nicholson is a miracle of skill and versatility. His entire house bulges with trophies won at field meets, hill climbs, English trials, scrambles, hare-and-hounds, enduros and road races. He simply does everything well.

He is best known though, for his spectacular record at Catalina. In spite of the most miserable luck that could befall a hapless rider, he has hogged nearly all the glory. He started off the first race in 1951 by engaging Walt Fulton in a grim duel during Saturday's fifty mile event for the 15 inch cycles. But then Fulton's oil pressure failed, and Nicholson streaked across the finish line with a comfortable lead over the field.

Next day, when the 100 miler got under way, it seemed certain that Nick would push his 30.50 BSA single to a repeat victory with equal ease. He rode with spectacular confidence as he slid and bounced

and scrambled out ahead of the rest of the riders. As the race drew to a close, Nick was running two to four minutes ahead of Walt Fulton, Charles Minert, and Del Kuhn.

Then, just about three miles from the finish line, he ran out of gas. With characteristic determination, he piled off and pushed the cycle along the road. After about half a block of developing horse power the hard way, he caught sight of a parked fire truck about 100 yards away. Nick dropped his cycle, dashed over to the fire truck, borrowed a can of gas and sprinted back. He fidgeted in agony while gasoline dribbled into his tank out of a ridiculously tiny spout, and finally managed to battle his way into fourth spot.

The 1952 Catalina race followed the same formula. Nick streaked to an easy victory in the 15 inch class on Saturday, and then got into all sorts of trouble in the big race next day. Things went wrong from the first. His 30.50 BSA would not start. He was still kicking frantically as, in rows of five riders each at thirty second intervals, the race got under way. When there were only two rows left ahead of him, the crew started to change the spark-plug. The switch was complete when there was only one row left. Then the recalcitrant motor snorted into life, revved once, and Nick was on his way.

At the fifty mile mark, Nick was locked in battle with Bud Ekins. The two riders were only four seconds apart when Ekins' clutch went out and Nicholson settled down to enjoy his lead. He was snorting along happily, five minutes ahead of the second place man, as the last lap burned toward a close.

Then the Nicholson jinx caught up with him again and his bike fouled its plug. He had a spare plug in his pocket—the one

they had pulled at the starting line—so he slapped it into the motor. Two miles later it, too, fouled up.

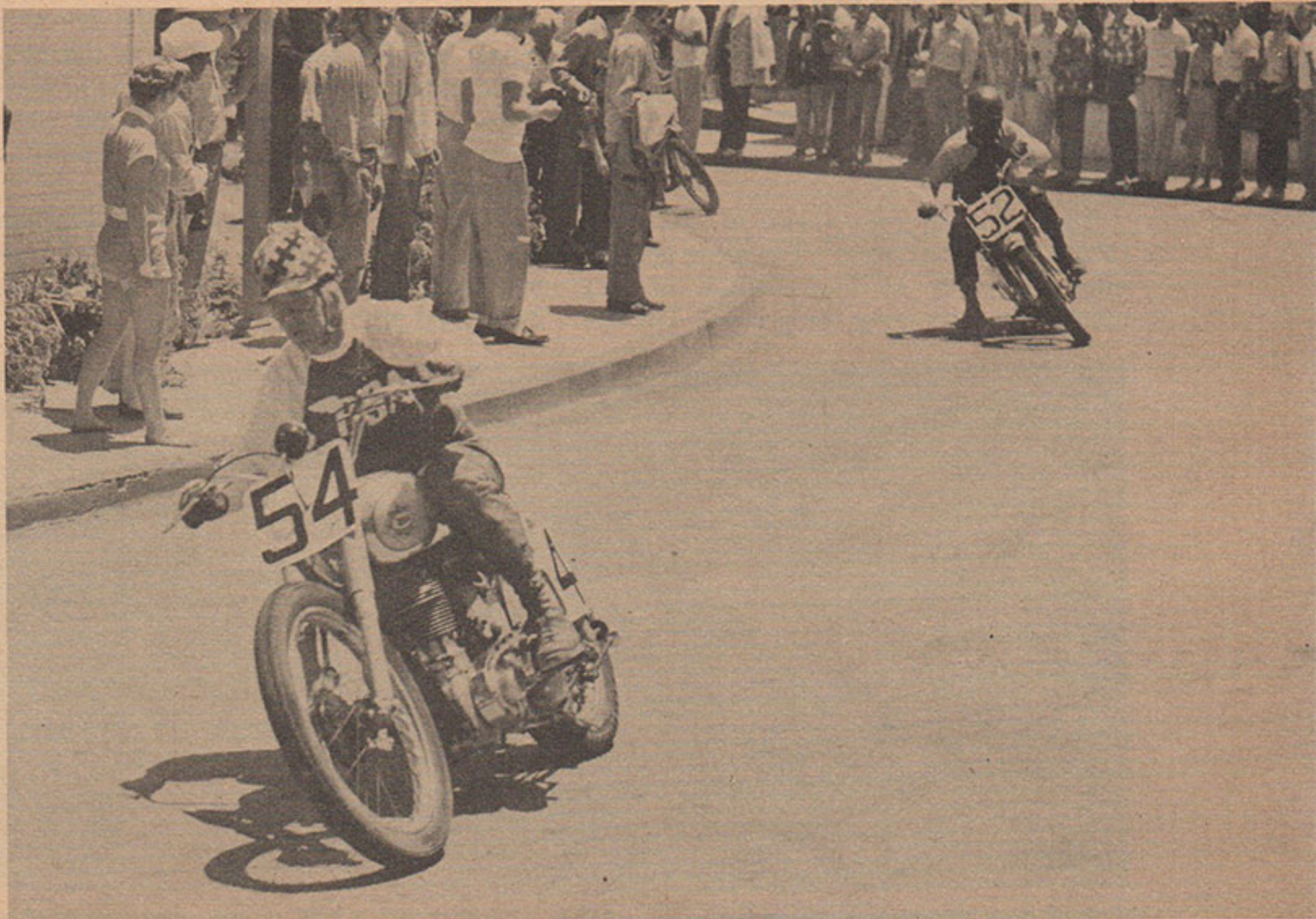
Once again Nick had to rely on himself for horsepower. He pushed the cycle up a hill and coasted down the other side. He says that his only intention was to go as far as he could. But at the bottom he ran into Walt Harper, who generously tossed him a new spark plug. Without even looking at it, he jammed it into the machine. The five minute lead had almost burned away, but he still crossed the finish line almost a minute ahead of the second place winner, Walt Fulton.

If Nicholson's only accomplishment was his record at the Catalina Grand National—three firsts and one fourth in four starts—he would still be considered one of the top riders. However, in addition to road racing, he is outstanding in all other types of competition. He had been riding a cycle for less than two years when his name started to spread through the grapevine. Riders who had never met him began talking about the new "hot shoe" who won at everything.

III

Nicholson learned to ride a cycle when his brother, Ralph Nicholson, bought one during the latter part of the war. Nick just rode it around the block from time to time. In February of 1946, though, he had the fever so badly that he bought himself a 74 ohv Harley-Davidson. He picked up the fundamentals of motorcycling so quickly and with such confidence that he rode his cycle back east that same year in company with some friends to see the Indianapolis race.

Nick was also fortunate in being able to join the Orange County Motorcycle
(Continued on next page)



Nick had more than his share of troubles, but took them in stride, like a champion must. He has proven many times, including the Catalina Grand National, that sheer grit is equal to skill



THE YANKS ARE COMING

continued

Club. At that time it was very active and loaded with talent. The field meets that the club organized were filled with difficult, rugged events calculated to test a riders skill (and nerve) to the utmost.

One cunning little bone crusher was an elimination race. Two stakes were set firmly into the ground about one hundred yards apart. The game was simple in theory. A group of riders raced around the two stakes. However, the last man around each time was eliminated. The result of a large group of determined riders bunching and crowding to get around each stake ahead of someone else can be imagined.

Then there was "kick-the-can." Two teams mounted on motorcycles squared off and each team tried to kick the can across the opposing team's goal. (Toes in spokes and vigorous kicks on the ankle bones were accepted as a matter of course.)

There were also precise tests of skill, like the conventional slow race. Nick completely disorganized the O.C.M.C. by rediscovering a lost art. He learned to slow down to a complete stop and then sit there, balancing, with both feet on the pegs. He explains that this is simple. First, it is necessary to cut away the wheel stops. Then, just as your speed drops to zero, you cross the wheel almost completely over. When the cycle begins to fall to the right, for instance, you turn the wheel to the right and move your knees to the left. That restores your balance.

When you put it that way, it *does* sound simple.

The ultimate refinement of the slow race is the "plank race." The same general rules apply. A 20 foot section of 2x4 planking is laid along the ground. The cy-

clist who rides along its length more slowly than anyone else, without touching a foot to the ground, wins the event. Nicholson once brought his cycle to a complete stop and balanced on the plank.

Then there was the stake race as a test of high speed control. The riders weaved through a line of stakes at the fastest possible speed.

An enormous variety of drag races evolved. In one, the riders lined up with their cycles facing *away* from the finish line. At the starter's signal, they had to spin around and drag to the line.

In the event called "passenger pickup" the cyclists would drag from one line to another, spin around, pick up a passenger, and drag back. A highlight of a group of these "pick-ups" was, of course, the passenger who hurled himself eagerly at the buddy seat and miscalculated his distance. The sight of a man seating himself firmly on a piece of ground immediately behind a spinning motorcycle wheel is guaranteed to pep up any field meet.

The "dizzy race" was generally put into the program just for fun. This type of drag race starts with all the participating cycles parked along the starting line. The riders stand about 25 to 50 yards behind their cycles and in front of a knee-high stake driven firmly into the ground. At a signal the rider bends down, grasps the stake firmly, and places his chin on top of it. Then willing hands spin him around the stake for a specified length of time. (Twenty or thirty seconds strikes us as a good round figure.) Then the cyclists are aimed toward their cycles and told to run over there and drag to the finish line. The first man who can stop spinning and find his machine generally wins the drag.

The O.C.M.C. and the many other very good clubs in that area dreamed up an endless variety of tests of skill to occupy energetic cyclists throughout the day of a meet; but the main events were the ultimate in testing general application of ability. No field meet was considered complete without English trials and, finally, a rip roaring scrambles or T.T. race.

With that kind of competitive training taking place and Nick's own habit of constant practice in the river bed, his abilities developed with amazing speed.



One of nine photographs taken (by photographer who expected a fall) at the same corner of a scrambles course, all of which appear identical, showing Nick's consistent style. He has proven his versatility by riding equally well on Harleys, Velocettes, Ajays and Beezers in every type event

IV

By 1948 Nick was beginning to hit his stride as a competition cycle rider. In addition to the local club events—field meets, hare-and-hounds, English trials, enduros, and hill climbs—he took a stab at track racing. Nick never did like dirt tracks, but he entered that competition with a flourish that is still being discussed around the camp fires.

He had practiced at a few events on a half mile dirt track in Oceanside, California, as a novice, racing against such experts as Chuck Basne, Ed Kretz, Floyd Emde, and Tex Luce. Even starting in that fast company, he made a few main events.

In 1948, he entered at the fast half-mile track at Carrell speedway. There, too, he had to race against amateurs and experts; but the first time out, he qualified. At the second race, he set a new qualifying record. And after his fourth race, the officials boosted him from novice to amateur—something of an advancement.

Even then, with almost no track experience behind him, Nicholson was unbeatable in the one lap qualifying times. One night he set a new record which was quickly bettered by Roy Andres. Paul Albrecht then beat *that* record with a lap so fast that he bounced off the crash wall on one turn. Nicholson immediately took his second run and not only beat all records again, but set one that lasted two years.

However, for some reason, the circular dirt track appealed to Nick least of all and from that time on, he concentrated on English trials and hare-and-hounds, and in the middle of 1948 he began to hit the winning formula. The first hare-and-hound he ever won was put on by the Compton Rough Riders in July of 1948.

The course went down twenty miles of the deep sand in the San Gabriel river bed. Nick took the lead almost immediately. After some steady running he stopped at a check point in a cool bamboo patch, and talked to the checkers for about five minutes before he continued. His motor began to overheat a bit after some more steady slogging through deep sand, so he stopped and climbed up on a bridge. He listened for other riders and could not hear a thing. He tried the same thing at the next bridge with the same result.

The first soul he saw who was in any way connected with motorcycles was Buster Boyde. Boyde was acting solely as a photographer in ambush at a water crossing. He later told Nick that it was a half hour before the next rider came by.

Nick never did see the second place man throughout the rest of the 100 mile race.

Nick continued to increase his skill during 1948. He is a friendly, gregarious personality, so he joined in the club activities whole-heartedly. He began to win more and more club events as his experience mounted, but because of modesty, courtesy, and a gracious way of either winning or losing, his success caused very little resentment. His bitter rivals in competition

events generally consider him a personal friend and will praise his riding skill, his personality, and his character loudly and at length.

V

In 1949 Nick determined to win the English trials championship of Southern California. (Both his brother, Mutt Nicholson, and Joe Koons, the BSA dealer of Long Beach, have pointed out that when Nick "makes up his mind to win something, he generally does.") At the present time the Trials championship is decided by about six events at different places; but in 1949 about ten or twelve championship trials were held.

Nick's incredible sense of balance that allowed him to hold his cycle at a complete stop with both feet on the pegs, and allowed him to balance on a 2x4, make him a natural rider for trials work. In addition, his experience in hare-and-hounds and constant cross country cow trailing gave him the strength and judgement necessary for the successful completion of the more violent traps. Even the American version of English trials is sometimes far from gentle. The traps are deliberately laid out to cover every possible type of terrain—up and down steep banks, over rock piles, and with tricky side hill turns. Nick managed to survive all the hazards and win the championship with such ease that he began to look around for more worlds to conquer.

VI

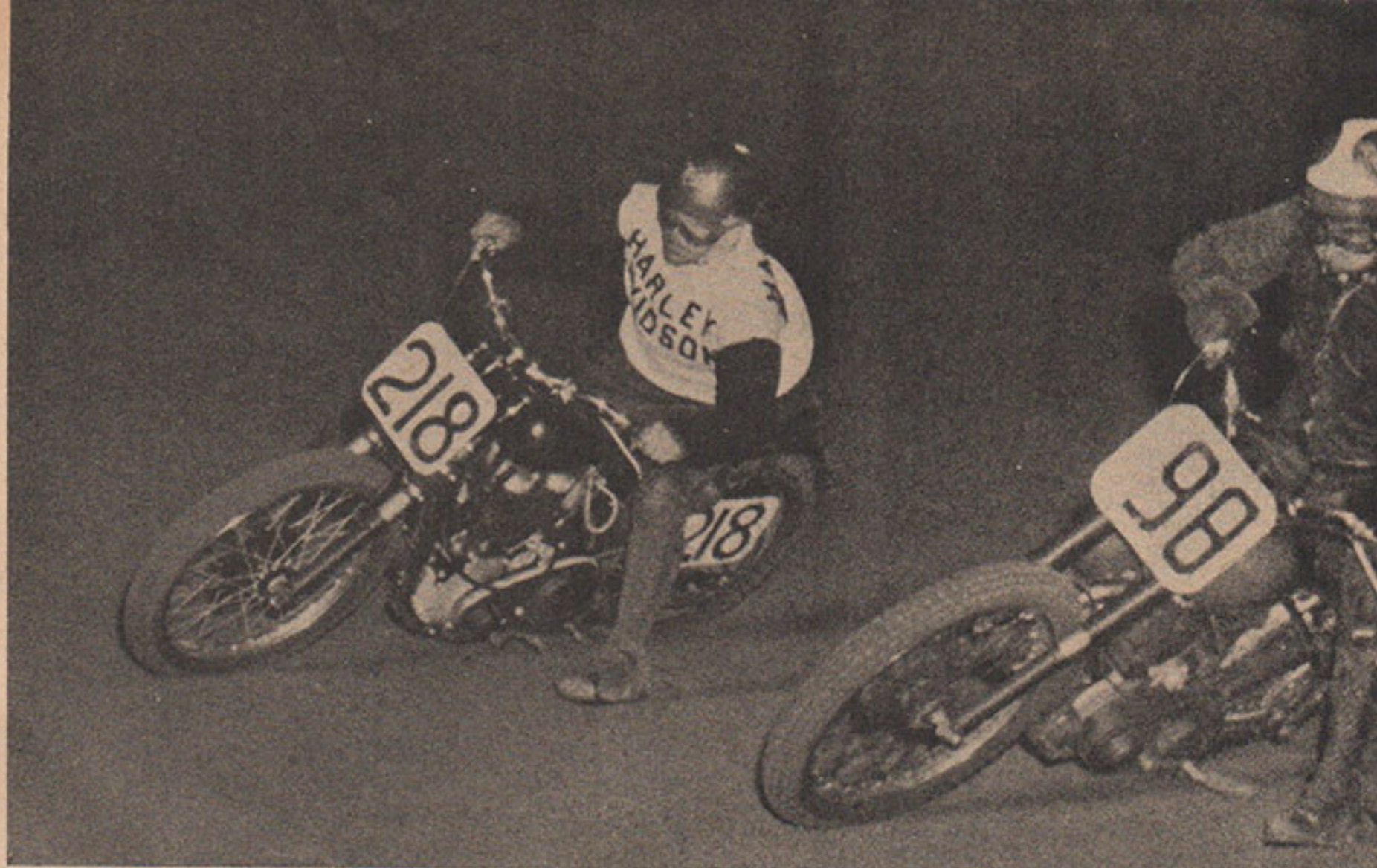
In 1951 Nicholson placed third in the English trials. But then, he did not compete in all of them. He had made up his mind to do something else that year. He wanted to win the Southern California hare-and-hound championship.

Nick went about the business of accumulating points with characteristic energy and dispatch. He does not even remember now how many runs were included in the championship, but when the start of the last one rolled around, he had accumulated so many points that he only had to finish the run to cinch the championship.

Nick poked along, taking his own sweet time, nursing his motor and admiring the



The tougher they come, the better Nicholson likes 'em. He's one of the very few all-around riders who excel in the woods or on the track



His first time out at Carrell Speedway, Nick looked as though he had been raised on a track

scenery while rider after eager rider roared past him. Suddenly he found himself out in front when the leaders all missed a turn. Nick still took it easy as they came snorting back and found the trail. He waved graciously as five riders churned past. When he finished, he was in sixth spot, and claimed the championship for 1951.

Nick has not restricted his riding to club activities, of course, but it becomes apparent after a few hours with him, that his greatest pleasures are found in them. He likes to talk about the friends he rides with from day to day, and the casual courtesies that are extended as a matter of course among riders in the small, club events.

He recalls one time in a hare-and-hound when a small screw dropped out of his carburetor and the gas began draining out. He tried to plug the hole with a twig, but the vibration always jiggled it loose. Finally, he sacrificed his chew of gum and plugged the hole with it. That worked well for a while. It got him almost to a check before it fell out.

There was a crowd around the checkers, so he was able to borrow a stick of gum. He sat on his cycle chewing as fast as he could to work the gum down into a usable condition. Finally, a bystander could no longer remain silent and watch Nick's fluttering jaw and look of rapt, motionless concentration. He asked Nick what he was doing.

"Oh, chomp chomp chomp chomp," Nick answered, "I'm just—chomp chomp—tryin' to get—chomp—gum—mmphh—carburetor."

Nick said the whole area was instantly full of hands offering well-chewed gobs of gum. He was able to plaster the top of his handlebars with an excellent reserve of emergency carburetor repair parts and be on his way.

VII

The most violent battles took place at the Big Bear run, the Greenhorn and the Cactus Derby. Nick's record on those big ones, too, is very good even though he has been cursed by incredibly bad luck. Of

course, on the long, long endurance runs so many things can happen that the element of luck always enters to a certain degree. Every top rider expects bad luck to hit him occasionally on those runs.

If a motor drops out of the frame on three runs in a row, though, it is safe to predict that faulty maintenance, and not luck, is the cause. It seems equally safe to say that if two separate sticks jump up and jam a chain on the same day and the second one breaks the chain, then bad luck can be blamed.

Nick has started in the Big Bear run every year since 1948, when he placed sixth. In 1939 he placed fourth. In 1950 he was running second to Del Kuhn and dropped a chain out in the desert. He patched it up with wire and made it back to a service station where he could fix it. Then, as he started after Kuhn, the chain broke again just as he reached the same spot. Nick watched the finish of the race in Big Bear that year. In 1951 a stick flew up and broke his chain. He finished but did not place.

In 1952 Nicholson was running in tenth spot about fifteen miles out when he came across Bill Henson, who had just suffered severe lacerations, a broken jaw and concussion in a bad fall. Nick immediately abandoned the race to help him.

He finished sixth in the Greenhorn enduro of 1950 (when it was a national championship) but in 1951 the jinx hit again. He was nearly to Red Mountain when his rear tire blew out. Nick managed to fight his way down the mountain on the flat, but he arrived at the check two minutes late.

Just after he left the check the tire came off the rim, so there was nothing to do but remove it. He finally fought the axle nut off with a little six inch spanner, got the tire off, and rode thirty miles across country on the rim. He still managed to get into the next check ten minutes early. Nick struggled on to a station where his brother, Mutt, was waiting with a new rear wheel.

After all that, he still finished tenth. Considering the way the breaks go, (Continued on next page)



THE YANKS ARE COMING

continued

Nick's record in the major endurance runs is very good. Barring mechanical troubles, he has managed to place well up among the winners.

We asked Joe Koons, the Long Beach BSA dealer who has been sponsoring Nick lately, about Nicholson's ability as an endurance rider. He pointed out the fact that has already become obvious: Nicholson is very good at everything. Then he added, "Nick has more stamina than any rider I ever saw. He finished the Big Bear Run in better shape than some of those who watched it. Then there was the last Catalina race. To win that he had to push his cycle up a mountain when the plug went out. That was after almost 100 miles of racing. At the finish, Walt Fulton, second place winner, had to be lifted from his cycle, but Nick bounced off looking as fresh as when he started."

VIII

It may be that there are cyclists in America better suited by skill and training to buck the European competition, but it is hard to conceive of one. In addition to Nicholson's proven superiority at road racing, he has all the characteristics of a good English trials man.



British trials demand rare concentration and balance—Nick has them both, shines just as brightly at this game as he had at other contests of speed and daring. He's CYCLE Magazine's choice to represent America in Europe

The point is made more convincing when we realize that what *Americans* call English trials are completely different from the trials actually run in England.

Here, we lay out about twenty artificial traps bordered by twine and stakes. The cyclist must ride through the difficult contours of the traps without touching a foot to the ground or breaking the string. The riding is all very slow and exacting. It is a test of skill and balance. When the rider finishes one trap, he putters over to the next and waits his turn.

In England though, trials are considerably different. The British traps, for one thing, are generally natural geological formations. Only rarely are they lined with string, because the formation of the ground makes only one course possible. Riders must pick their way through those traps almost exactly as we do here, and every trap is under observation by officials who keep the point scores.

However, in England the trials are also what we call an *enduro*. The entire course may cover 100 miles. The rider must pick his way through one trap, and then he must arrive at the next trap—perhaps miles away across rough country—on a definite schedule. If he misses the schedule he loses points.

Bud Ekins, who is just back from England after competing in scrambles there, informs us that the *genuine* English trials are just like the Greenhorn enduro, and one of our so-called English trials, *if both were rolled into one*.

With Nicholson's experience in trials, hare-and-hounds, and enduros, he could take a poke at the British in road racing, genuine English trials, scrambles, and, actually, anything else they might dream up.

Ekins also states that, after his experience in English competition, he feels that Nicholson could pick up the tricks and begin beating many of the European contenders at their own game within a few months. In a year or two, he feels, Nick could be near the top.

IX

Captain Thompson, though, still wants a man for Grand Prix pavement road racing. If one of his riders wishes to tangle with scrambles (Moto Cross), or trials, he writes that he has no objection.

Road racing will be the business at hand most of the time—and, with the possible exception of Jimmy Phillips, who has already refused the offer—there is no one else available who can match Nicholson's success or experience.

His showing at the Torrey Pines road race—actually the only completely paved circuit cycles have competed on in this country—demonstrates his superiority even though he did not win the main event.

In the three lap event for the 15 inch class, he jumped off to a start among Jimmy Phillips, Ed Kretz Jr., and Charley Cripps, with all four riders trying to hang draft on everyone else. The race became simplified quickly when Cripps fell and, a little later, Kretz slid into a hay bale.

Then Nick passed Phillips and crossed the finish line for a win.

When cycles lined up again for the forty inch race, Nicholson was placed in the second row; but he got off to a terrific start, and, by the time he hit second cog, he was in the lead. When Nick came around after the first lap, he was past the pits, followed by Jimmy Phillips, and both riders were out of sight again before the third place man turned into view. As Nicholson remembers it, "I led for five laps and fell off in the sixth."

Actually, Nick ran into a big oil slick that had been dumped in the pit turn. He got under way again, but his shift arm had been bent by the fall, so he could not change gears. He had to rev the motor and slip the clutch to accelerate out of the turns. As soon as he got back to the pits, he stopped to straighten the shift arm. When he finally pulled out of the pits, he was in seventh place; but by burning up the pavement, he managed to work his way back up to second spot behind Don Bishop. One photographer caught him in a tight pavement turn at Torrey Pines with both wheels lifted completely off the ground.

He kept his head down and continued to bore on after the fleet Don Bishop, but he was still to pay for his fall. Fortunately, he heard the first squeal of the rear tire as his motor started to freeze, snapped out the clutch in time to avoid a bad fall, and coasted for a while. Then he engaged the clutch with a jerk and broke the motor loose. He toured two laps slowly and crossed the finish line.

When he examined his cycle, he found everything from the motor back solid with oil. Even the tire was well greased.

In spite of everything, he was still in third place.

So there is a man who might soon break into the win columns of European Grand Prix racing. In addition, he might help to carry out Captain Thompson's plan to build up a racing team of top American cyclists in Europe. He might be instrumental in re-awakening the interest of the American public in a sport that has too long been neglected.

He has demonstrated skill, versatility, vitality, and determination in proportions that are almost never found in one man.

With his background of experience, he can compete with any group of European motorcyclists on its own grounds and stand a chance, within a few months, of winning.

He is quiet, courteous, has a natural sense of good manners, does not drink or smoke, and generally seems to represent the type of character that would cast most credit on both American and European sports.

And, above all else, he has won consistently in the new European forms of motorcycling and can do it again.

It is difficult to find anything wrong with his qualifications. As long as there is a possibility that he might accept the offer, we cannot see anyone else to suggest.

Can you?

Indian BRAVE

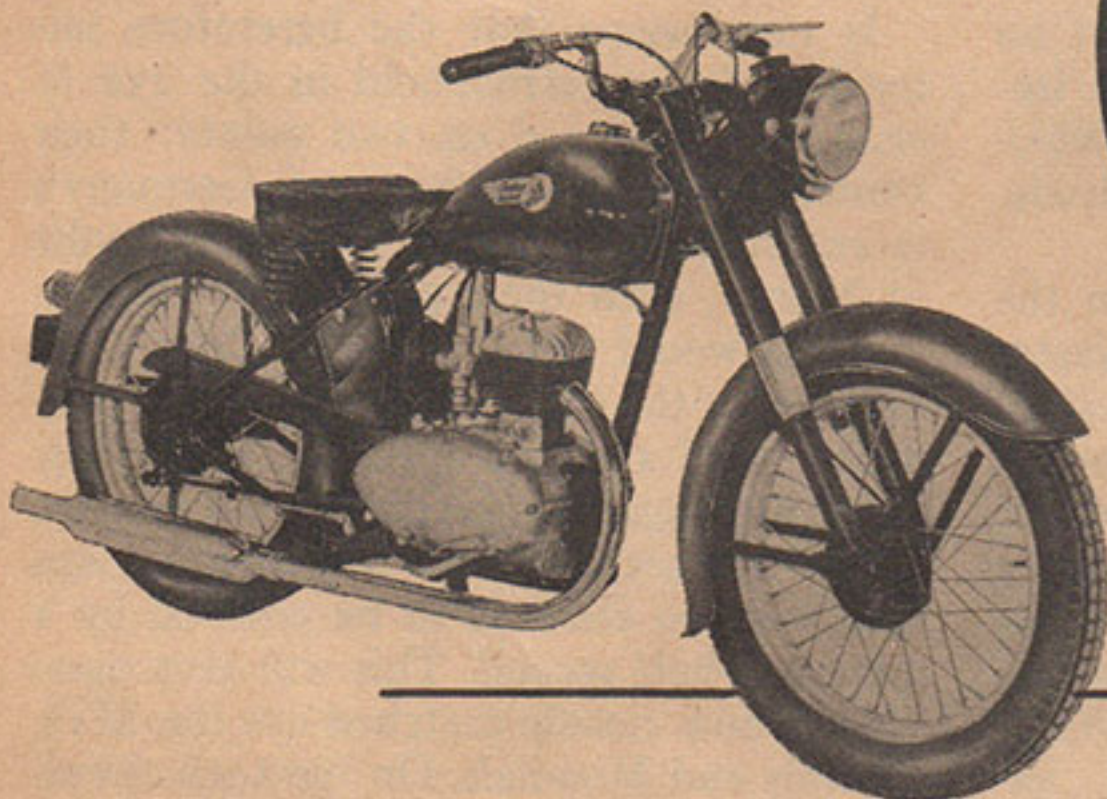
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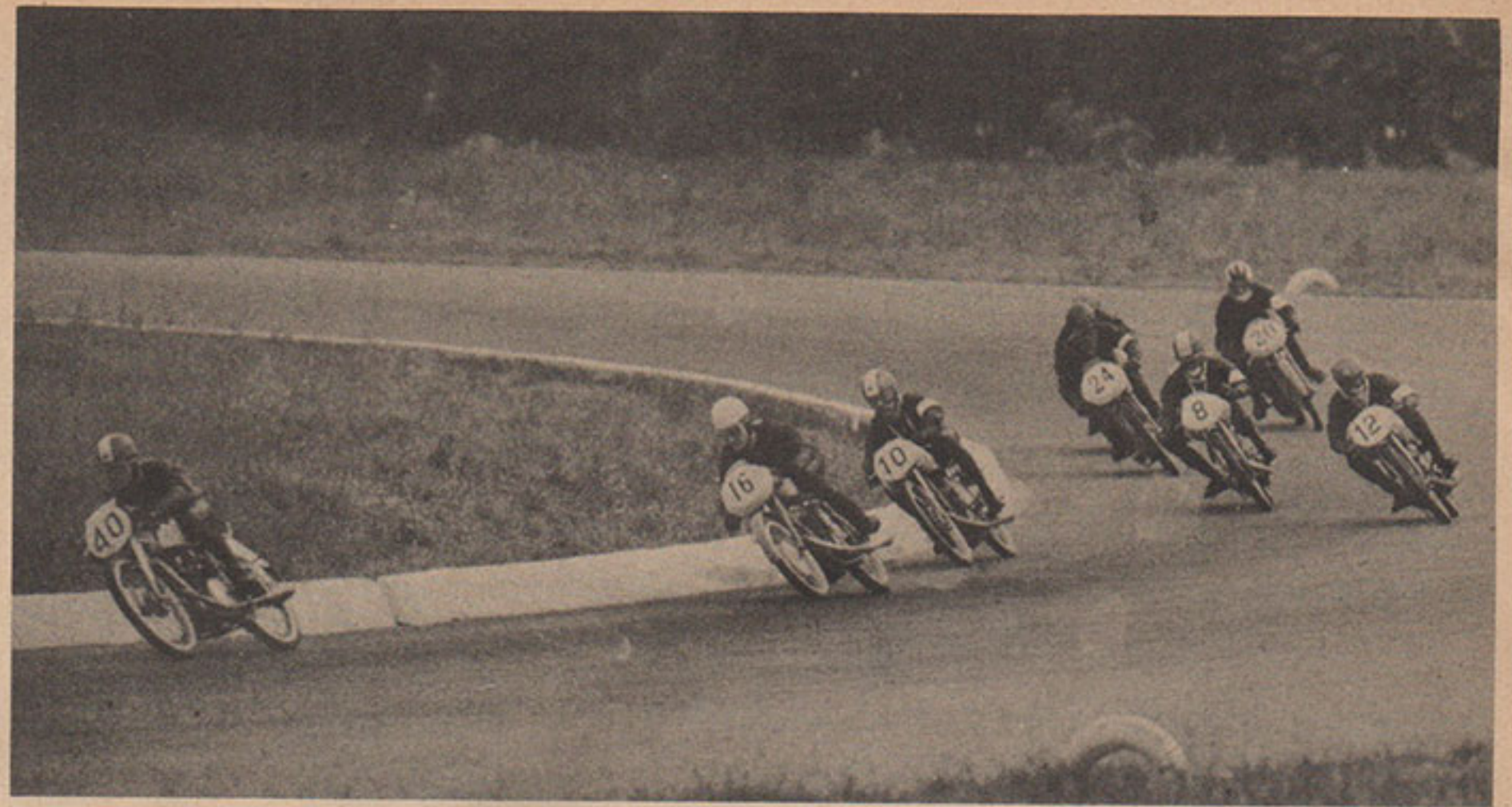
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MONZA GRAND PRIX

text and photos by
Rodolfo Mailander

IT HAD BEEN a big day for the Italian motorcycle industry. They had carried off victories in four out of the five championship races, winning every event they had entered. Technically their success had been even more complete since the honors were shared by four separate manufacturing firms. Monza was also notable since it represented a turning point for German industry as well. It was their first official appearance outside of Germany. Thus the old triangular struggle between England, Germany and Italy begins once again. After the showing the Germans made in the smaller classes, we can all be rather concerned about what will happen when they line up their big jobs in the future.

After the results of the German Grand Prix, a strong battle was expected in the 125 cc class between NSU and the Italians, but actually the German threat was much stronger in the 250 cc class where it was hardly expected. Strangely enough the



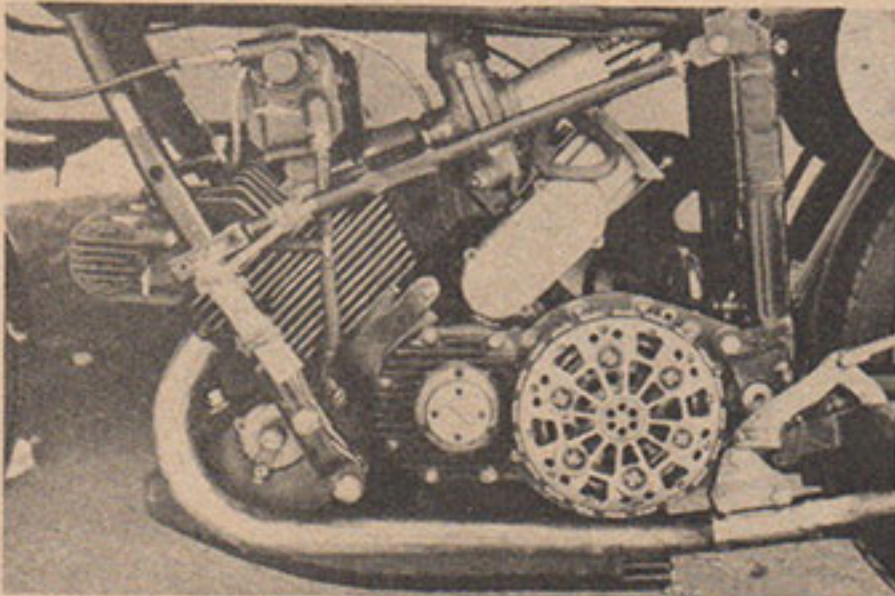
Although many Americans feel that a lightweight race would lack crowd appeal, the 125 event often climaxes the show in Europe. Note overhang of second and last place man's front fender

125 NSU that defeated the Mondial on the Solitude Circuit failed to play an important role at Monza, while the 250 NSU, which was hardly impressive at Solitude, had already superrated the Guzzis.

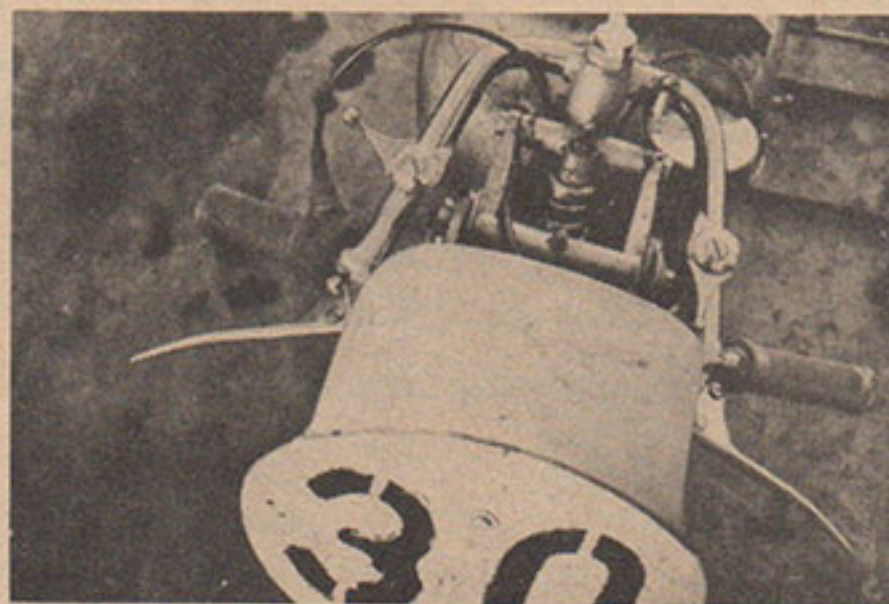
English cycles normally prevail on the more difficult circuits, while the faster Monza track more readily lends itself to the Italians. The explanation is simple: English riders are very well trained for the more twisting type of track, showing great skill where fast changes of direction are necessary, while the faster Italian riders, like their cycles, do not seem quite so adept in the bends. Getting good, all-around riders in Italy seems to be a problem since the Italian industry has already engaged foreign riders. In fact, it was Englishman Les Graham who defeated both the English and Italian pilots and brought their first big victory to the firm of MV Augusta after years of vain attempts with their second-born four cylinder machine.

It now seems that the heretofore untouched Italian stronghold in the 250 cc class is endangered on two points: their concern over new riders and Germany's re-entry. In spite of the reassuring results at Monza, even their position in the 125 cc class would not seem very clear.

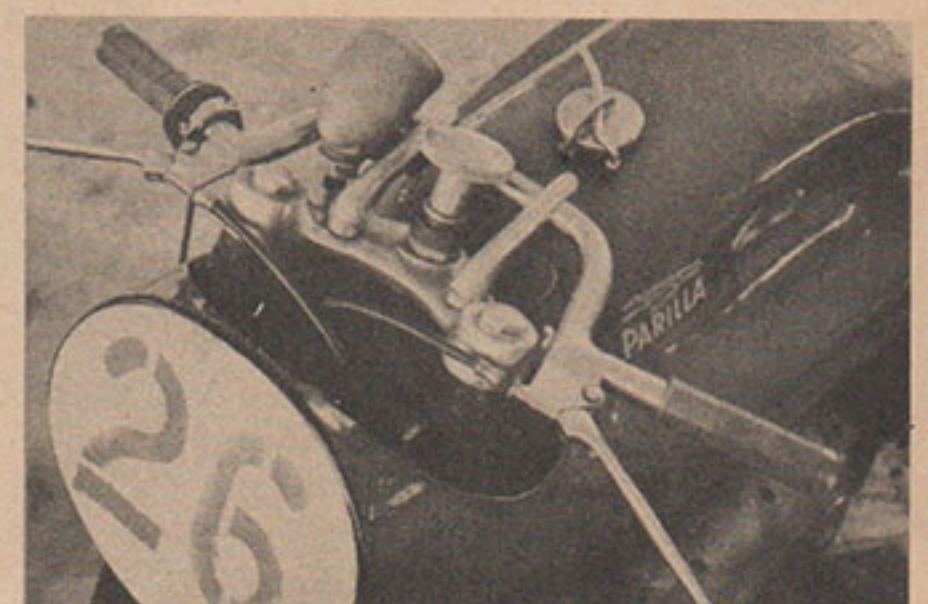
Opening the day's races, the 125 cc pygmies turned a 16 lap sprint of 62.3 miles. After five laps, six machines were running within two second's time and after 10 laps four were so close as to be covered by a mere one-half second. This will give some idea of how closely matched are the MVs, Morinis and Mondials. On the 10th circuit two MVs, one of which had previously established the fastest lap at 86.2 mph, had dropped back a couple hundred yards and in the last lap the Morini was also a bit distanced. Les Graham, MV, whirled out of the last corner ahead of Ubbiali, Mondial, Mendogni, and Morini, who were sucking at his tail. At the precise moment



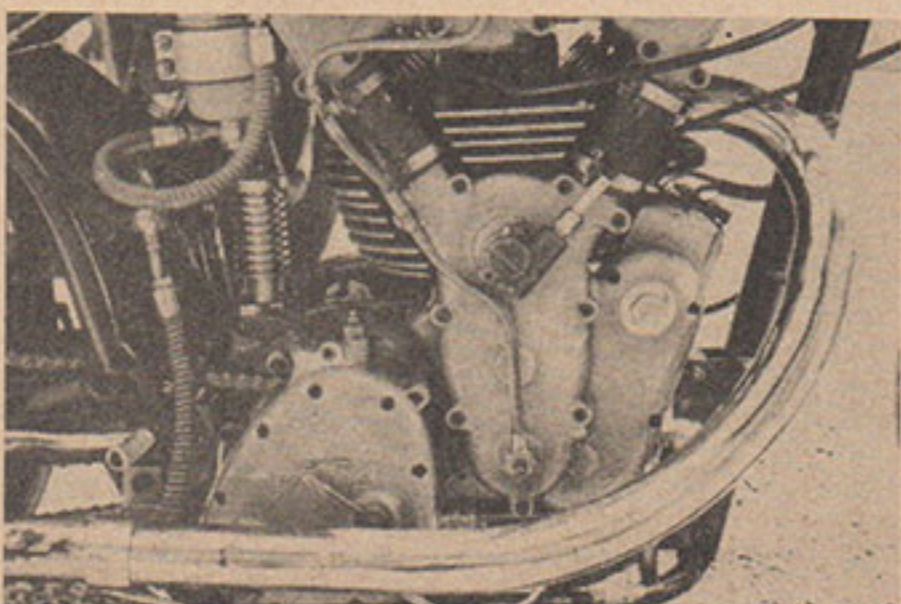
Experimental 500 cc AJS frame with added reinforcement. Although AJS racing engines are often inclined, street machines never are



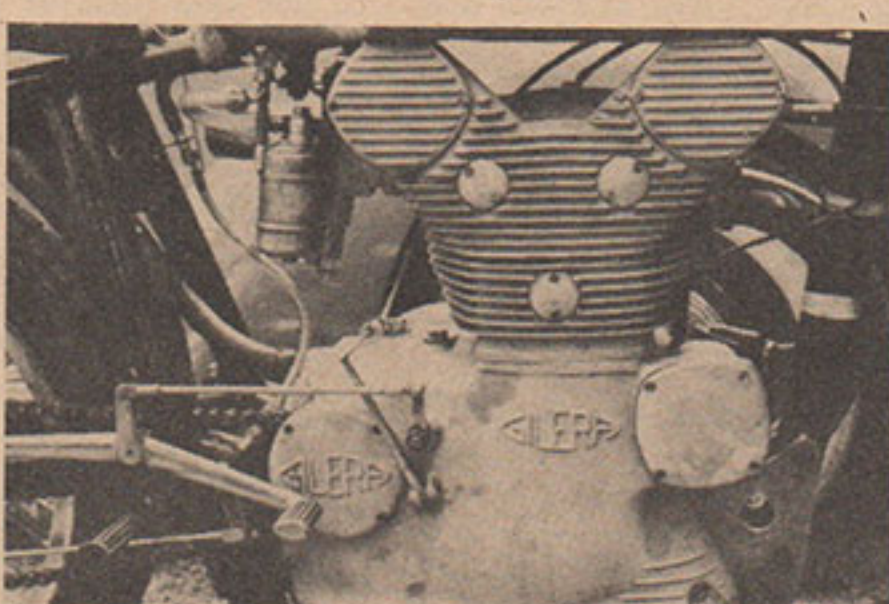
Mondial riders actually steer from ahead of the front forks. Their riding position is further indicated by position of tach, sunken in tank



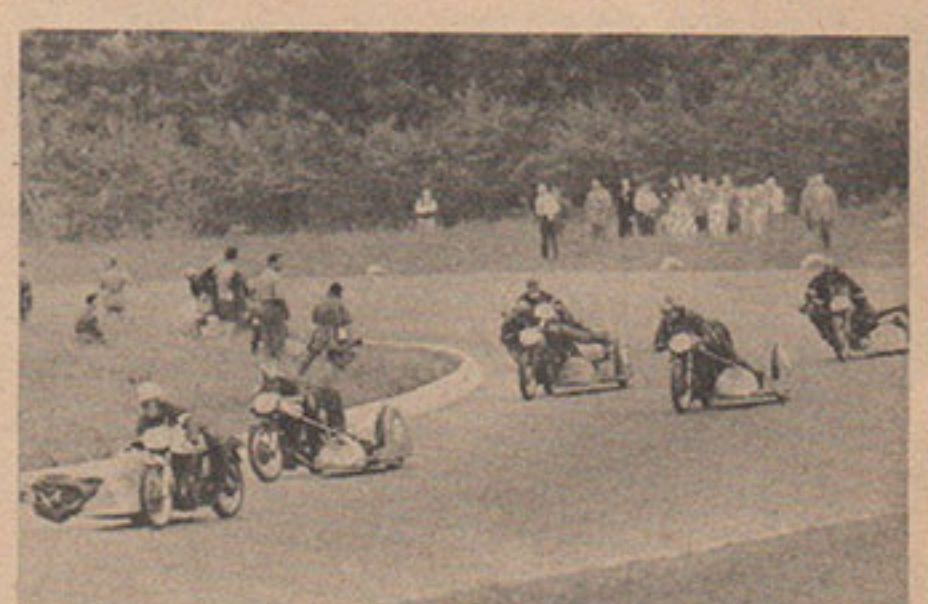
Handlebar layout of the Moto Parilla appears to have been so constructed as to be adjustable yet close in. Note Italian quick-fill gas cap



A new 250 cc Parilla with two chain-driven overhead camshafts. Although a bit more susceptible to wear, chain drive offers least friction



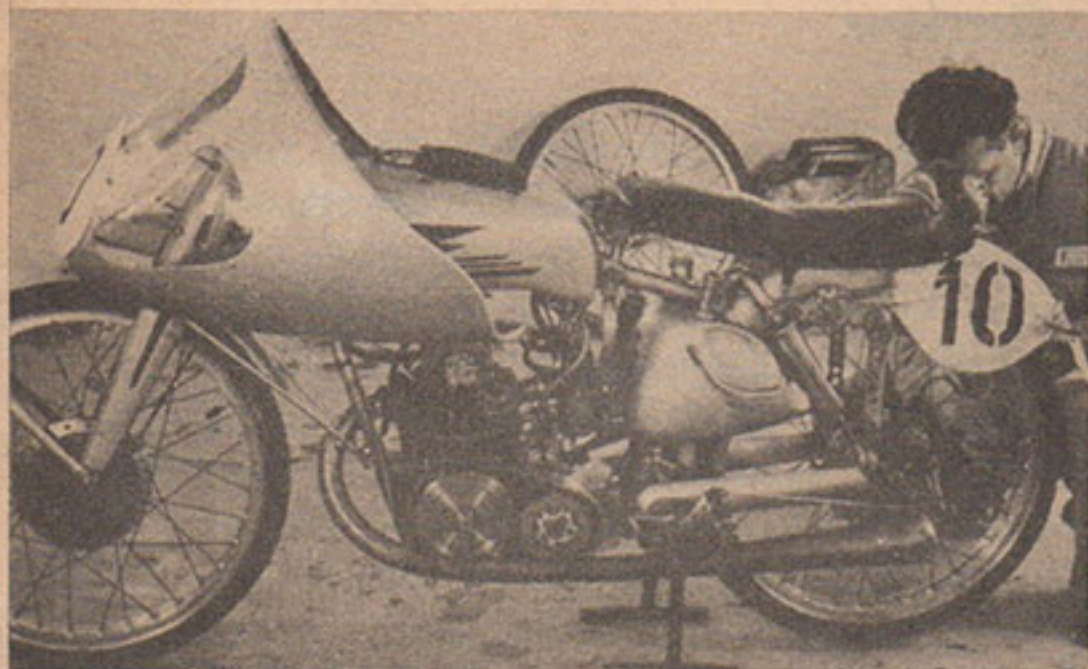
Gilera's new 500 cc Saturno with dual overhead camshafts. Note the complete lack of outside oil lines and the smooth contour of engine block



Sidecar techniques vary little, but notice that while most cars are carried on the left, the leader has mounted his on the opposite side

Ubbiali, with Mendogni still on his tail, whipped out of Graham's wind-shadow and passed the Englishman. Then Mendogni pulled exactly the same trick on Ubbiali an instant before they spurted over the finish line. The Morini had but .3 of a second lead on the Mondial, while Graham's MV trailed the leader by a mere .6 of a second. This triple play by Mendogni is typical of the shrewdness found on continental tracks. Seeing that he could not alone pull off this show earlier in the race, Mendogni waited patiently, timed his sprint until the last instant, displaying a terrific sense of racing strategy. Fastest lap: Sala, MV, 2'43.4"—86.2 mph.

An almost identical show developed in the 250 cc class; four riders being within .7 of a second after five laps, within 1.2 seconds at half-race and two of them, Lorenzetti, Guzzi, and Haas, NSU, finishing with the same time and only half a wheel length difference. The clocks were useless here since the results could only be



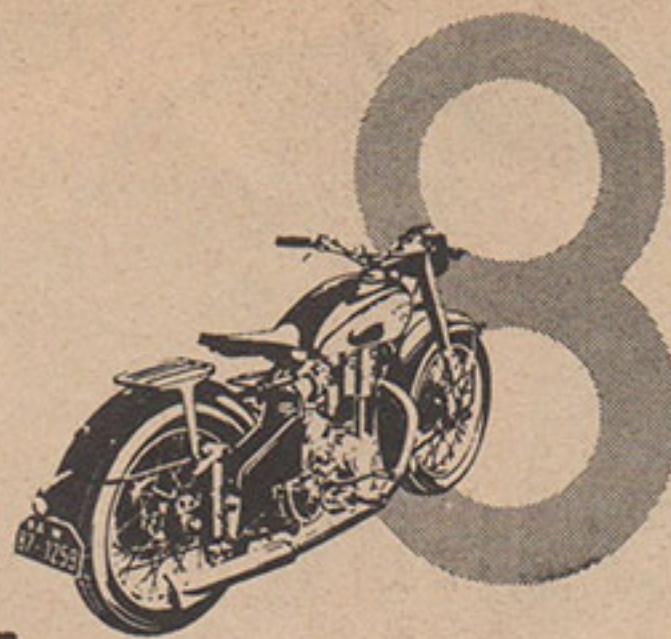
Plexi-glass and aluminum cowling gives the tiny 125 cc Moto Morini (Italian) a weird appearance. Single camshaft job, ridden by winner, has open flywheel, swinging arm suspension

determined by a photograph taken the instant they crossed the line. Even more exciting was the fact that both Haas and Lorenzetti had equalled their best lap speed of 95.5 miles per hour. Fastest lap: Lorenzetti (20th) and Haas (15th), 2'2.75"—95.5 mph.

The 350 battle was a complete English feature since no Italians and only one German were in that category. Schnell, the German on a Horex, arrived sixth with one lap less than the winners. Once more the Nortons had confirmed their superiority over AJS as Kavanagh, Amm and Armstrong took the lead, gaining three to four seconds in every lap in respect to AJS. In the end Amm, the Rhodesian, had slowed a bit since he already had a 30 second safety margin. Fastest lap: Amm, Norton, 2'19.8"—100.8 mph.

It was the Italians who dominated the sidecar race, for the Gilera pilot Merlo could just not be beat, in spite of the fact that master Oliver's engine let him down in the 19th lap when he was running fourth. Norton's big man this year seems to be Smith who, while 58 seconds behind the fleeting Gilera, battled with still a second four cylinder Gilera until it was forced to stop for a plug change. Fastest lap: Merlo, Gilera, 2'31.2"—93.1 mph.

In the final big piece of the day, the
(Continued on page 37)



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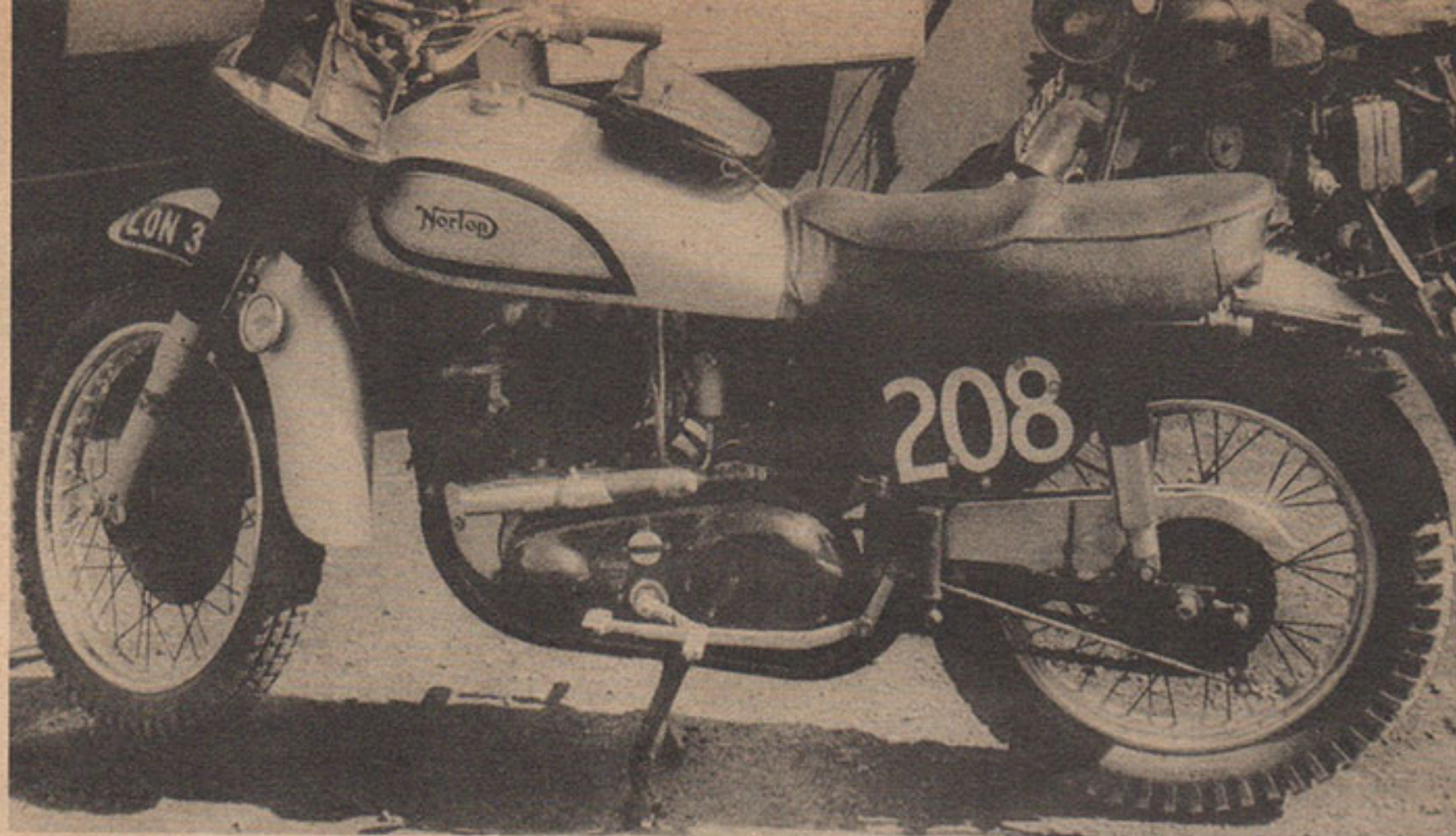
FEW RADICAL CHANGES have been made to motorcycles from Europe. In the main manufacturers have left well enough alone, concentrating on detailed small matters to improve comfort and safety. There has been no drastic change in matters of transmission or, in most cases, suspension. Several new models announced are facsimiles of machines already produced as established favorites. In some cases, despite added refinements, the purchase price has been reduced.

AJS—MATCHLESS

With neither addition nor subtraction to or from a well known range, Associated Motor Cycles Limited will continue producing 19 models in their London factory. Nine carrying the winged M motif, the remainder the well known initials AJS. Several interesting modifications have been made, all, without exception, improvements our editor has long looked for. None the less it demands a vastly experienced eye to spot them easily.

Increased braking power to the front wheel is achieved from a brake actuating lever with a forward pull, ensuring maximum movement of the forward shoe. Buddy seats, fitted to all spring frame models will doubtless provide a more comfortable ride to driver and passenger. Unfortunately, supply at the present does not permit use of them on their other models.

Yet, another improved seal for the primary chaincase is fitted to all models. This, in the form of an endless band manufactured from synthetic, oil resisting rubber, will be easier to remove and replace than the seal introduced a year ago. Other modifications common to all models include fitting of a chromium plated ring in the top piston ring groove in order to reduce cylinder wear as has been proven by extensive tests. Rear fender ends are now detachable and footrest hangers fitted outside the lower frame tubes.



Much talked about Norton 88, a 498 cc twin, is equipped with new race-bred, swinging-arm rear suspension that has been proven most road-worthy. This machine competed in the ISDT

HEADED FOR YOUR GARAGE

By William Onslow

The manufacturer has, in giving thought to the many pleas for a "Sneakproof," designed and produced a simple, yet effective locking bar only a few inches in length. Available as an extra and costing only a few cents, it will prevent all but really brutal attempts at removal.

The robust suspension systems of both makes are little changed, only the telescopic front fork being slightly altered in a very minor way. The upper fork covers, previously securely bolted to the steering crown, are now retained by rubber washers. The lower covers are retained by pressure of the main springs. Models destined for the American market will have chromium gas tanks and wheel rims that will put added sparkle to an already lustrous finish.

ARIEL

Information already divulged by the Selly Oak concern omitted the usual reference to motor component parts. This could mean that little change, if any, will be made to motors already known. It does, however, allude to the general lines of what is to be a nine model range that includes two new models in the multi class.

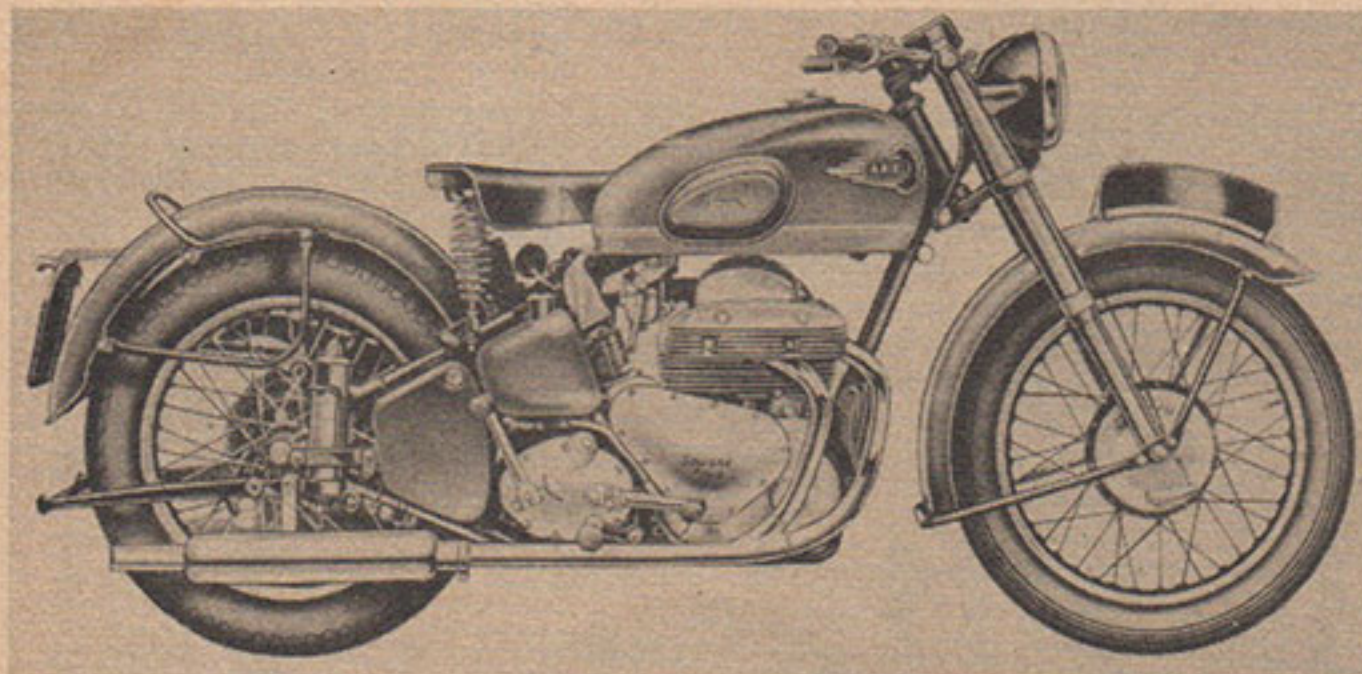
The entire range is to be fitted with a new type heavyweight Burman gearbox, the clutch operating lever retained inside

the outer case gearbox shell. Ariel type plunger springing and quickly detachable rear wheel is available for all models to which those fittings are not standard.

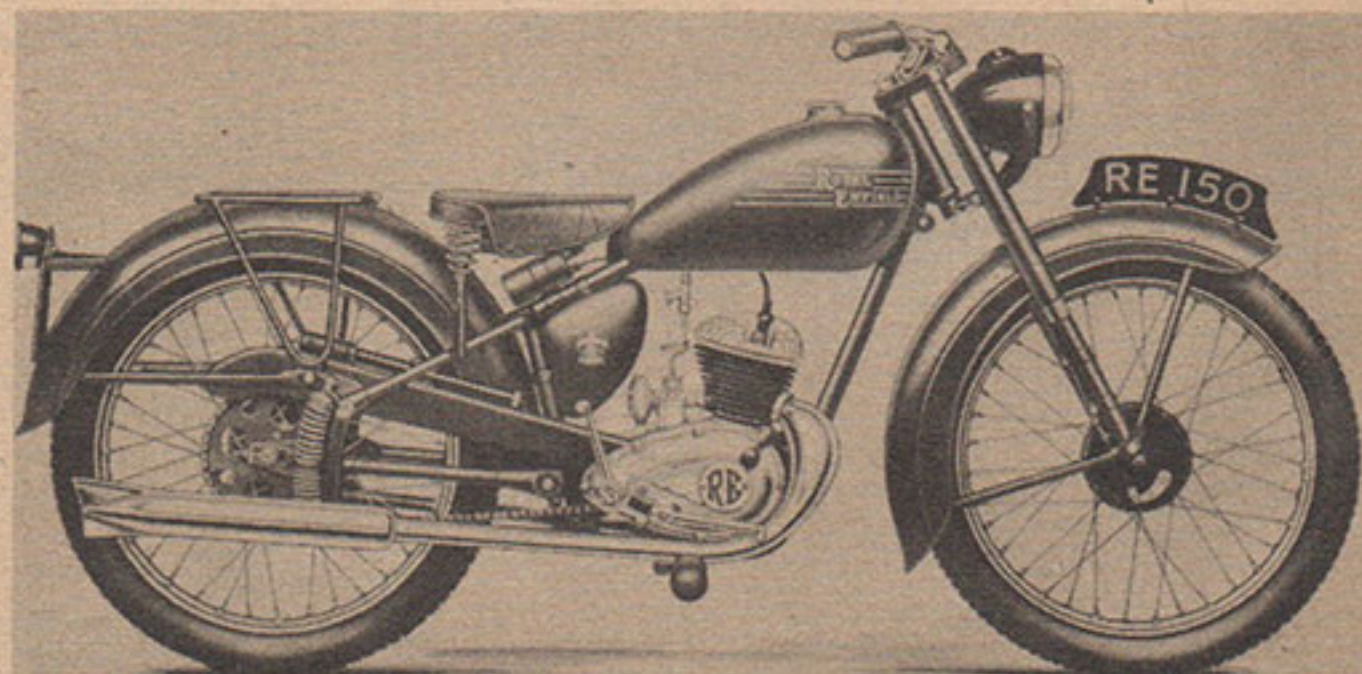
Newly introduced, a new Square Four to be known as Model "4G" Mk 2. It is finished in attractive Wedgewood Blue enamel, with a five-gallon tank in lieu of the smaller four-gallon one of the already known Squariel; this multi should prove a certain winner. It differs also in having two double exhaust manifolds with semi-dual stacks. This, with a standard pattern front fender replacing the valanced style fitted to the Mk I, imparts a look of potency and speed. Suspension units allow a 3½ in. movement rear, and 6¼ in. front wheel movement.

Second newcomer is an added Hunter twin, Model KHA. It is, as implied by the model letters, a version of the Model KH, having light alloy head and barrel. Both are fitted with a four gallon gas tank and the colors will distinguish either model at a glance. Deep Maroon is chosen for the KH, Wedgewood Blue for its sporting compatriot. The same paintwork serves to identify the Hunter single—the prefix "Red" has been dropped from all models—500 cc Model VH from the Model VHA.

Paintwork of the 350 cc Hunter, Model NH, will be a claret tank with gold lining.



Finished in Wedgewood Blue enamel, the newest Ariel Square Four is fitted with a rakish-looking pair of double headers in place of the old single stack and now has a five-gallon gas tank instead of four-gallon



Pip-squeak of the Royal Enfield line is the RE 125. It has taken on the appearance of quality with the fitting of a full swinging-arm rear suspension. While not oil dampened, it appears to be quite sufficient

Frame, fenders, forks, etc., black enamel. The model VB, 600 cc sidevalve will be finished in stately black and finally the 500 competition Hunter in deep claret enamel and polished dural fenders.

BSA

Several alterations in details are to be made to a large range that will be more colorful in the coming year. Models of over 250 cc will be fitted with a neat, streamlined headlight cowling; its pressed steel form housing speedometer, light switch and ammeter. A newly designed registration plate moulded to the sweep of the rear fender will grace all machines except the variations of the 125 Bantam. These carry not only a stop and tail light combined but a red reflector at the lower extreme.

Other modifications deal with separate group models as instigated by the BSA concern last year, thus producing similar machines under a group letter heading.

The letter "A" is designated to the twin cylinder machines. Three in number, having one piece crankshaft, push rod operated overhead valves and single camshaft, they are the 650 Golden Flash "A10," the 500 "A7" and 500 "Star Twin" sports edition of the "A7." Each receives ample, but quite smooth stopping power from seven and eight-inch diameter brakes at rear and front respectively. They each share the detail alteration to gas tank fittings and the tank will be affixed by a horizontal bolt front and rear. Such bolts, passing through rubber bushes, serve to isolate the tank from the frame and will eliminate considerably shock and vibration.

Other modifications to the three are: Finned collars for the stacks, replacing the plain clips, an alteration to the prop stand lug now brazed instead of clipped to the frame, and the fitting of a spring loaded oil seal in the crankcase drive side to prevent oil seepage to the primary chaincase.

Together, they boast extra glitter from chromium plated wheel rims and tank panels, but paint jobs differ. The A7 maroon; its sports counterpart, polychromatic mist green on forks, fenders and tank, and dark green lustrous enamel finished frame. The Golden Flash retains the already familiar beige, but is enhanced by the sparkle of added chrome.

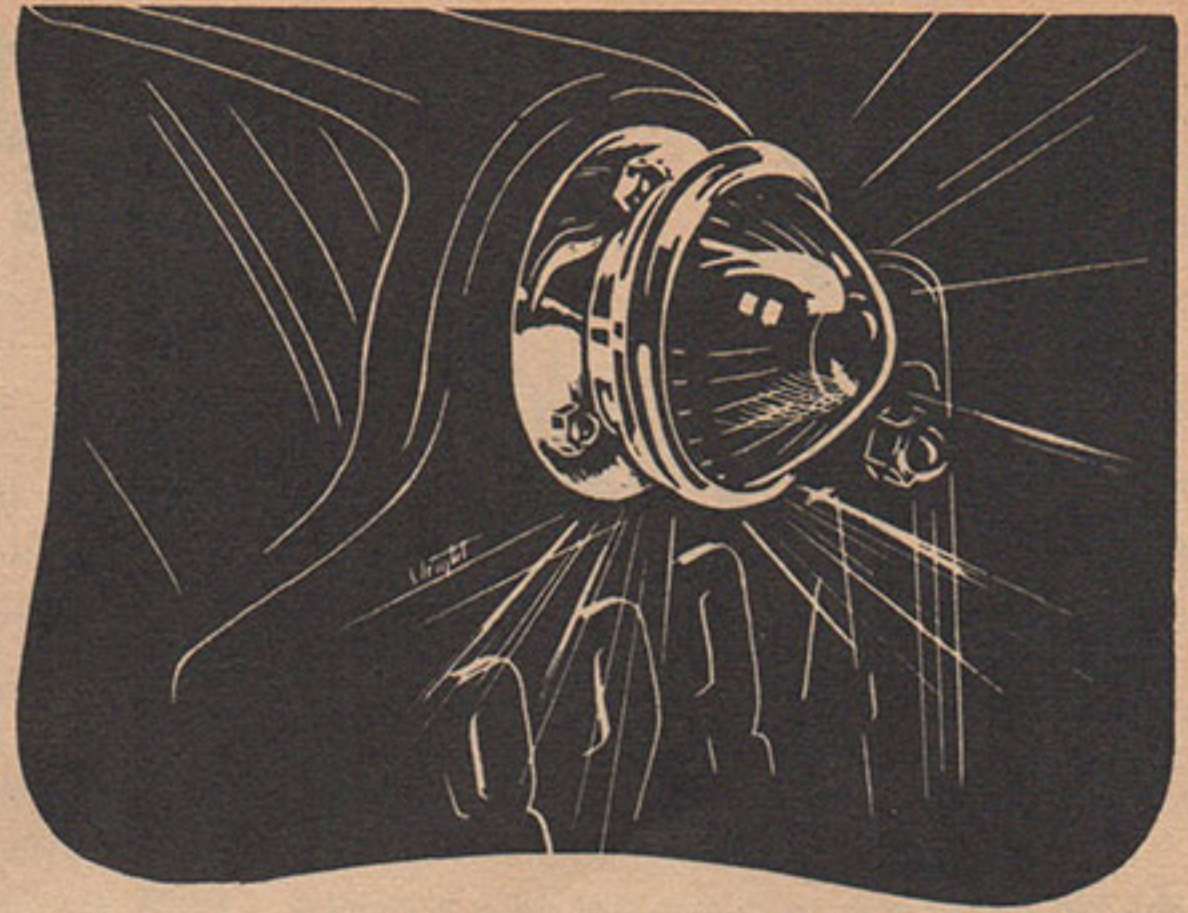
Group "B" embodies touring and sporting machines of both 350 and 500 cc in single cylinder form including the "Gold Star" and competition mounts. Cooling properties will be increased by larger and deeper finning to the cylinders of the two roadsters: 348 cc B31 and 499 cc B33. The latter will feature a connecting rod half an inch shorter in length, but bore and stroke will not be altered. Compensation will be gained from a wrist pin bore set that amount lower in a split-skirt piston which reduces tendencies to piston-slap. This model, together with most others in the 500 range, will have an 8 in. front brake. Paint job, as standard to the two, is maroon with chrome tank panel; alternate finish in black enamel on frame, forks and fenders may be specified.

(Continued on page 40)

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OPENING DAY ON A 200 C.C.

Illustration and text by Bud Wright



The big critter was so heavy that once it started swinging we would be thrown off our feet

“HEY, CHARLIE! Get a load of these guys, they think they’re going into the back country on these coffee grinders. They won’t fight their way out of camp, much less up that rock trail. Why, you couldn’t even get a car up there, much less make it with these things. Where are the pedals? Does it have an engine or is that a stomach pump? You gonna pack ‘em on your back?”

There were all sorts of brilliant witticisms and wise cracks as we unloaded the 200 cc (11 cu. in., 8 hp) Excelsior and Zundapp two-strokes from our pick-up truck on arrival at the hunting camp at Horse Trough Springs, Lassen County, extreme northeastern corner of California. This was conceded to be the best deer hunting in the whole state. At least my partner, Glen Clinton, thought so, for we had traveled 650 miles from Los Angeles with that understanding. “I’ll put one of the big critters in front of your rifle, all you need do is pull the trigger,” he quipped. “Don’t care much about the hunting, but the cow trailing sounds great,” I told him as he was trying to convince me to join him on opening day.

Glen had been to this spot the year previous with two other fellows, whom we were to meet later. It was a beautiful camp site, situated in a green meadow, cut in two by a small creek and surrounded on two sides with high rimrocks jutting up a thousand feet from the valley floor. Overlooking yet another valley below, we were afforded a view which seemed to stretch endlessly from mountain to mountain, across countless valleys with Mt. Madelin silhouetted against an awesome but not too promising evening sky. Several tents were scattered over the area and a couple dozen horses nipped leisurely at the wealth of long grass. Dogs were everywhere, but not of the usual city breed. These were all hunting hounds of the truest form, having cut their teeth on trips such as this at an early age. The hunters who made their annual pilgrimage here were old-timers who had obviously prepared months ahead of time for opening day, as evidenced by the elaborate individual camp sites. Some had been coming to this area for the past 20 years, but never had dreamed that the sanctity of their domain would be violated by a lowly

mechanical contrivance. Needless to say, they were in for somewhat of a revelation.

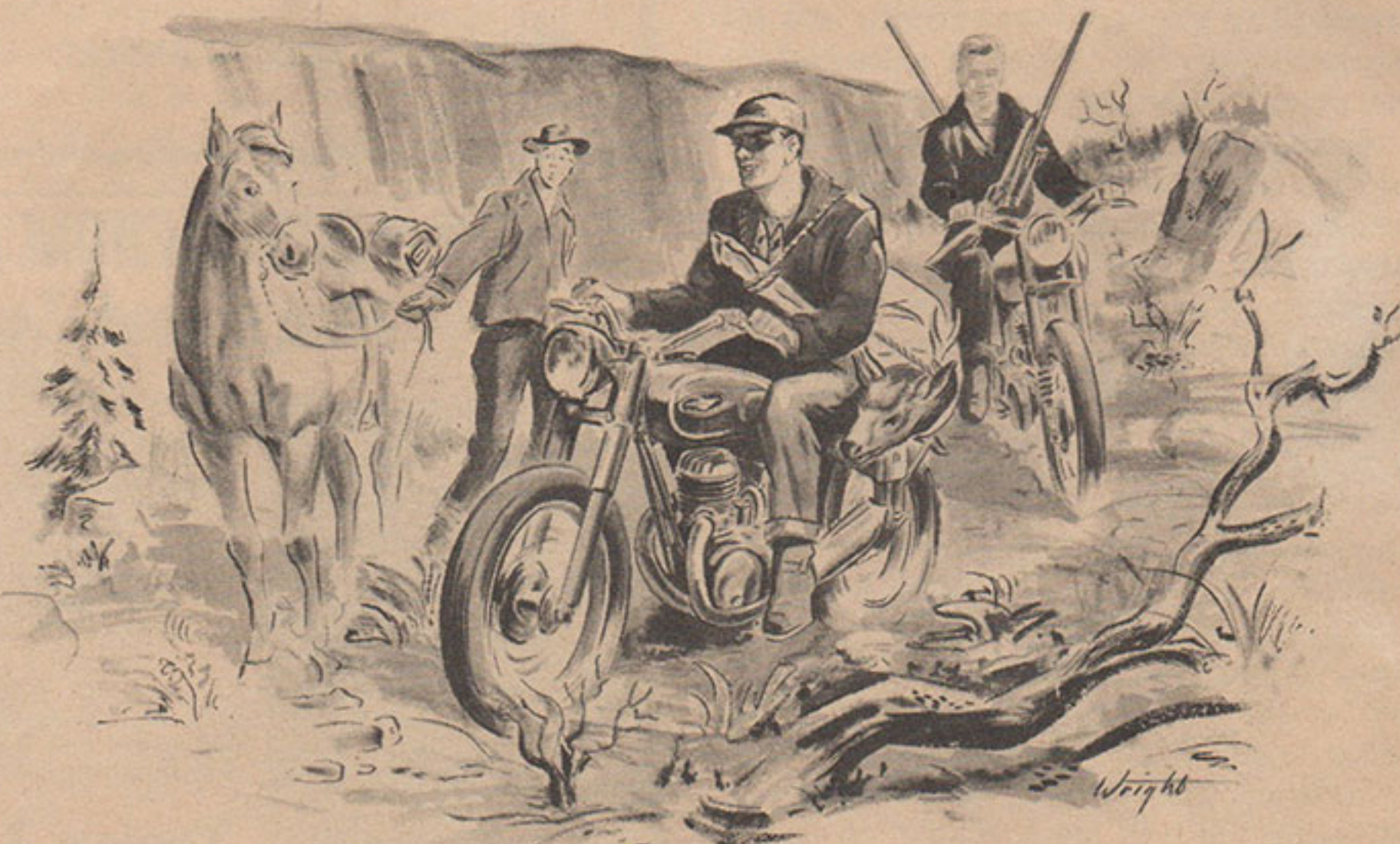
This being my first deer hunting trip, I felt much like the rookie’s first day in boot camp. “Safety” was a strange position on the carbine Glen had brought along and he patiently checked me out on loading and firing routine. These guys were talking in terms of 30.06’s, 270 Mausers at 400 yards and 8-power scopes. I would have felt much more at home in a discussion of the virtues of an overhead cam or a good hot argument on tuning a two-stroke. So, I was more or less avoiding their conversation, busily preparing our sleeping bags inside the pup tent. Suddenly, the unmistakable and sinister rattle of a rattlesnake buzzed close by. I yelled to Glen to bring his Luger pistol and ran across to where two dogs were yapping excitedly, darting in and out under a pick-up truck. We spotted the 11-rattler viper among some melons which had been cached in the shade of the truck. Yelling and cursing at the dogs to get the hell out, their owners actually had to hurt the mutts by kicking their bellies to keep them back. Glen fired one shot and almost severed the rattler’s head, which was then completely parted with a shovel as it continued snapping its jaws and flicking its tongue in and out of a wide-spread, threatening mouth. The head was immediately buried to keep the dogs from getting it; the hunters explained that the head of this 5-footer would be just as deadly an hour from now as it was before being cut off.

All the excitement had left me with little desire for spending the night in a

sleeping bag on the ground. However, later that night after a crude but satisfying hot meal from the trusty Coleman stove, I began to wonder before corking off, just how the rattler’s tell-tale warning could have been so unmistakable to such a city dude as myself who had never heard one before. We came across them quite often on hare-and-hounds runs and enduros out on the desert, even ran over them, but I’ll never know why there was no doubting that ominous buzz.

The following pre-opening day was spent cow trailing and talking to many other hunters. Everyone we spoke to expressed the same amazement and interest in the little bikes, pinning us down with question after question. “Is this the little job they call the J.A.P.? Is that the Mustang I heard about? How fast will it go? How much does it weigh? What does it sell for? How many miles per gallon? It sure takes you around, doesn’t it?”

The answers we got to our inquiries were equally confusing. No one had seen any deer and far too few signs. One red-capped, double-billed Sherlock had talked to another who had seen a doe and a fawn and that was all the report we could get. Things simply didn’t add up, since this was the greatest deer hunting country in the entire state. We should have seen at least a dozen by now. Later we learned that the severe winter of last year had taken an extremely heavy toll. The snowfall was so intense and of such duration that the deer had actually died off from starvation by the thousands. We almost decided to move on, but after much de-

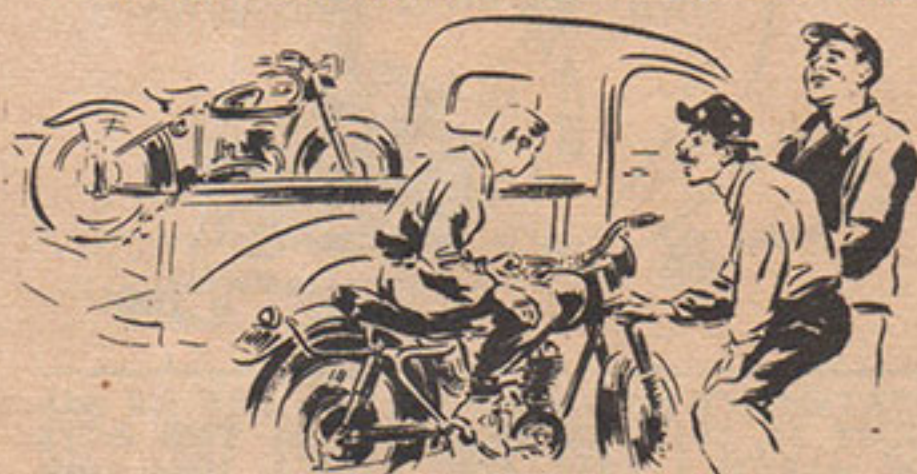


Glen passed the buck through the narrow ravine. Our experience gained in endurance runs was really paying off, plus the fact that we were picking up some new tricks. A few weeks later, Glen won the 200 cc class of the Checkers’ rough and tumble hare and hound on his Zundapp two-stroke

liberation and debate, agreed against it. We would give it another whirl tomorrow on opening day.

At 3:15 a.m. warm sleeping bags were kicked off and by 3:30 the delicious aroma of bacon and eggs drifted across the camp. Two cups of coffee later, all semblance of peace and serenity of a very picturesque hunting camp suddenly exploded with the ring-a-ding-ding of our two-strokes. We made our way past several tents, across the creek and started up the jagged, rocky 5-mile trail. Loaded down with rifles, ammunition, canteens, rope, knives and assorted other gear, the little machines proved completely up to the task as we picked our way up the difficult trail.

It would be impossible to describe the surprise and amazement of some of these old-timers who had taken this same trail for years. They simply couldn't believe their eyes, as they stepped aside to let us pass. Why, these things couldn't even get across the creek back at camp, they thought, and here they were clear up here several miles from the site, in the blackest of night, over the worst kind of rocky trail that even gave their horses a bad time. Yet, the little singles buzzed along, picking their uncertain way through the rocks and brush, moving on up the trail.

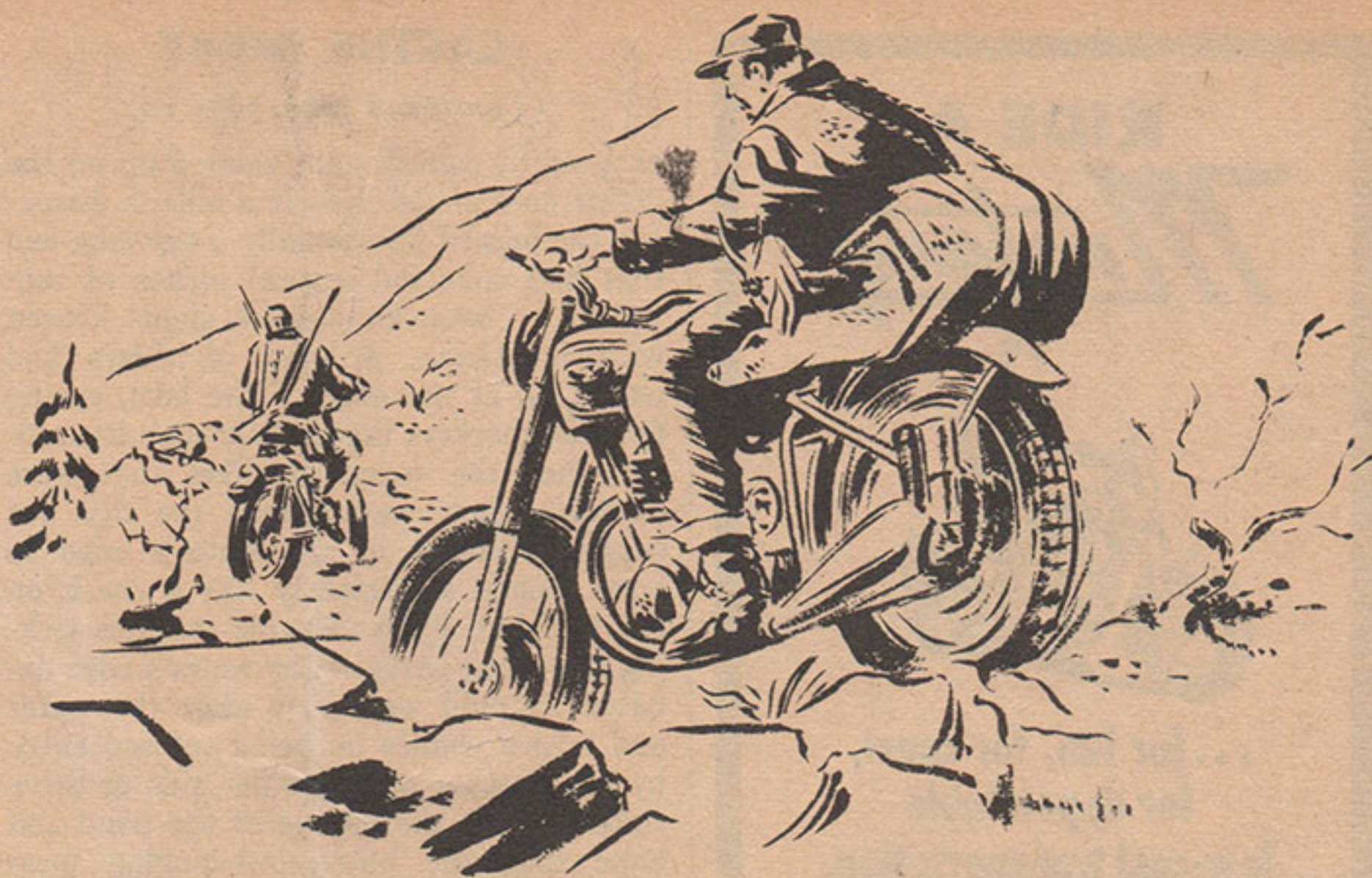


"Where are the pedals? Does it have an engine or is that a stomach pump," they quipped

It wasn't long, though, till we found ourselves in an endless bed of lava rock which seemed to get bigger and more treacherous the farther we went. Finally, hopelessly lost, we waited for daylight, which shortly lighted the main trail up about a hundred yards to our left. The large rimrock was about a half mile ahead and there is where the two-strikers popped their last. It was now even a challenge on foot.

After parking the machines, we hiked to the top of the rimrock to an advantageous position overlooking a huge area below and sat down to wait. It wasn't long before a couple of shots split the stillness and we spotted three very large bucks and a doe running right down the rifle barrels of two hunters that we knew were somewhere on our right. Not knowing exactly where they were, we held fire. They opened up and dropped one of them. By this time, I was about to turn a back flip, stunned by the grace and speed with which the big beasts ran. It was a beautiful sight to see and somehow I felt sorry for the one that didn't get away.

During the next hour, we spotted four more doe and two bucks, one of which is illustrated being brought out in a very unorthodox manner, hardly befitting his majestic nature. Yes, it was on Glen's Zundapp, because he shot it—I only shot at it.



The 200 cc two-strokes were just powerful enough to pull us through, just light enough to lift

I must have fired as one would a shotgun, about three feet above his head, because it was the first time I had ever let the trigger fly on anything other than a shotgun. Well, the important thing was that we had a deer and now were to get the last laugh on those characters back at camp.

We experienced very little difficulty in tying the deer on. After gutting and peppering him down to keep the flies off, his carcass was wrapped in a bed sheet and laid across the back fender with all four feet tied together in front of Glen's lap, completely enveloping man and machine. The head was swung up and around out of the spokes and with a few half-hitches around the deer and the bike, we made for camp.

The trip back to camp was quite easy and uneventful. The Zundapp was more than a match for the added weight and made the five mile trip with no strain. The whole camp turned out to see us ride into the area, claiming they had seen deer brought in many different ways, but this beat everything.

After we unloaded the deer and were wrapping him in a tarp to be placed in the shade, one of our buddies, Mat, came into camp for help to bring in a big four point, which he had knocked down earlier. He and another companion, Burle, had been struggling with it all morning and it was more than they could handle. We grabbed some rope and bed sheets, fired up the bikes and headed up-trail once more. About a mile out, the trail forked and after a half mile or so further, it got so bad we decided it would be impossible to get the machines out if they had a deer tied on board, so we abandoned the bikes and hiked on up.

They had a big buck all right. The trail was so narrow there was room for only one man at each end of the two by four which ran through the buck's legs. I couldn't get over how heavy my end of the pole was. Regardless of which end I was on, it seemed I must be carrying the whole thing. We completely knocked ourselves

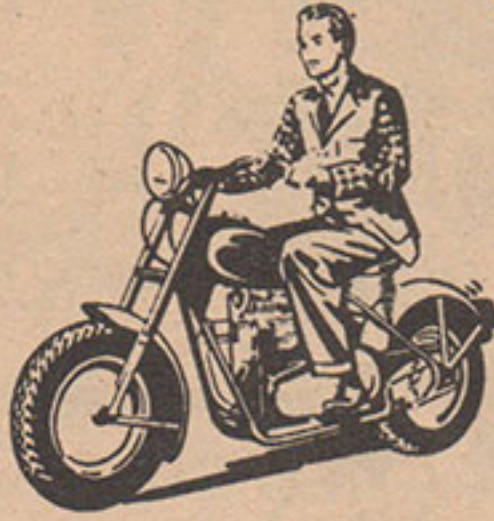
out. At times it would commence swinging so violently as to actually knock us off balance and on several occasions we dropped him completely. Finally giving up, we decided it best to get a horse, as the worst part of the trail was still ahead where we had left the bikes. Glen and I walked back down, fired up the machines and picked our way down a trail so rough, steep and rocky, it appeared impossible and unbelievable that we could have gotten the bikes up under their own power or otherwise. It would have been impossible to have taken a larger bike, regardless of make, model or horsepower, through this lava-rock strewn trail. Perhaps a good, reliable 125 cc could have crawled over such a bed of horrors, but only with a great deal of manual assistance. The 200 cc machines were ideal for this type of going, as at no time were they short on horsepower, it only being necessary to occasionally lift the front or rear wheels over and around the larger boulders. With a larger machine, it would be impossible to heave and lift first the front and then the rear wheel, especially under such adverse conditions on a steep side hill splattered with sharp, jagged lava rock.

Once back in camp we gave in to old dobbin and the rest was a simple task of going back in and packing the deer out on horseback. Well, perhaps they had the last laugh on us after all, but at least we had two fine bucks. We didn't get skunked and had enjoyed a wonderful hunting trip. Besides, we had conclusively proved the practicability of two dandy little machines that were just the ticket for hunting as well as bringing 'em back.



The hounds had spotted a rattler in the melons

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CACTUS DERBY

(Continued from page 10)

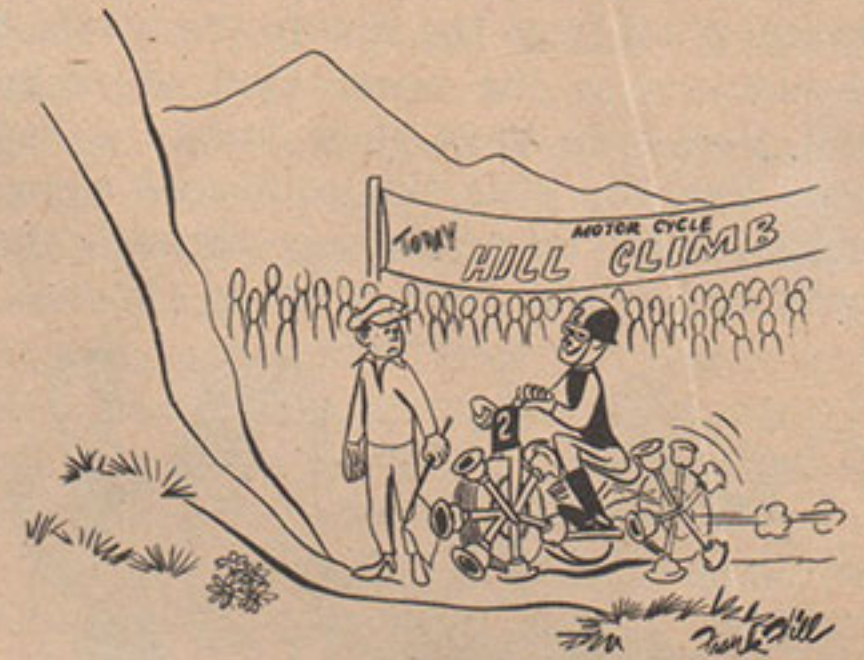
as a sea of watery mud loomed up on the desert floor ahead. Nearly a mile in diameter, the hazard was actually a dry lake-bed that had collected several inches of rain water . . . what an ominous sight! Frozen with indecision, a band of riders had pulled up at the edge of the lake, eyeing first the markers that led through its middle, then the string of bikes that were plodding their way around the dry but soggy perimeter of the water's edge to what looked suspiciously like a check on the far side. With valuable minutes ticking away, the party at the water's edge debated: Should we try to skirt the water and take a chance on being refused entry by the checker on the other side or drive right through the middle of the pond and hope that the bottomless-looking mess would not swallow us up? Finally, one, then another eased out into the water until we were all spinning and thrashing our way across. Fortunately, the water was only 3 to 4 inches deep and the mud beneath it was another 3 inches. The pilot crew later stated that below the 3 inch layer of mud, the ground was as hard as rock and that lath stakes, used to mark the course, could hardly be made to penetrate it. It is interesting to note that this particular section caused considerable controversy later on. While the majority of riders plodded sportsman-like through the gumbo hazard, others did go around it, several being disqualified on this score. Actually, both the layout crew and the mud-shunning riders were at fault since the rule book states that wherever a specific hazard exists, both sides of the exact course shall be marked and the rider go between such markers. In this instance, the slippery path was only indicated by a single string of arrows.

Up popped the devil once more, down the road a piece, when the Bombers' pathfinders pointed their trail up one of the southland's most vicious sand gullies. About a mile long and cocked at about 15 degrees, the walls of the 15 foot deep, V-shaped ditch were set at about 40 degrees. Unable to decide just which part of the deep sand channel offered the best footing, I tried first the sides, then the bottom, eventually shooting out of the ditch for a go at the surrounding brush-studded territory . . . there was no relief. Had it not been for a shortage of bike-riding checkers who could have gotten into this wasteland, there would have been a control at the end of the section. As it happened, we all had a chance to make up any lost time by the next check, most riders clocking in at "Big Rock" early.

Two more noteworthy sections emptied the Riverside club's bag of tricks for the day. About 10 miles out of Cabazon we were routed over that vicious rock-splattered, soft shale hill that has now become synonymous with the Derby. Usually appearing on the night leg of the run with a 24 mph average, the daylight schedule had been bumped to 35. Many were late, but

a surprising few were on time. One of the most amazing performances was turned in on this section by Frank Chase and a special-built Indian Chief when he broke a chain coming over, repaired it and arrived at Cabazon only one minute late. Yes, he was on time at the secret prior to the rough stuff. The last real call for speed came between Cabazon and Gilman Hot Springs, an all-out, broadside-packed mountain sprint that ended in vain since the Gilman check was unmanned and route card mileage figures were in error.

In attempting to analyze the '52 Derby, one can't help but keep returning to the all-important fact: this year's run was tailored for that kid who's been seen less and less at the finish line during the past few years—Mr. Average Rider. He got the checkered flag this time (101 out of 193 finishers) and was all smiles when asked the big question, "Will ya be back next year, guy?"



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1. The names and addresses of the publisher, editor, managing editor, and business managers are:
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Editor: Robert L. Greene, 838 Craig Ave., La Canada, Calif.

Managing editor: Dick Day, 8185 Gould Ave., Los Angeles 46, Calif.

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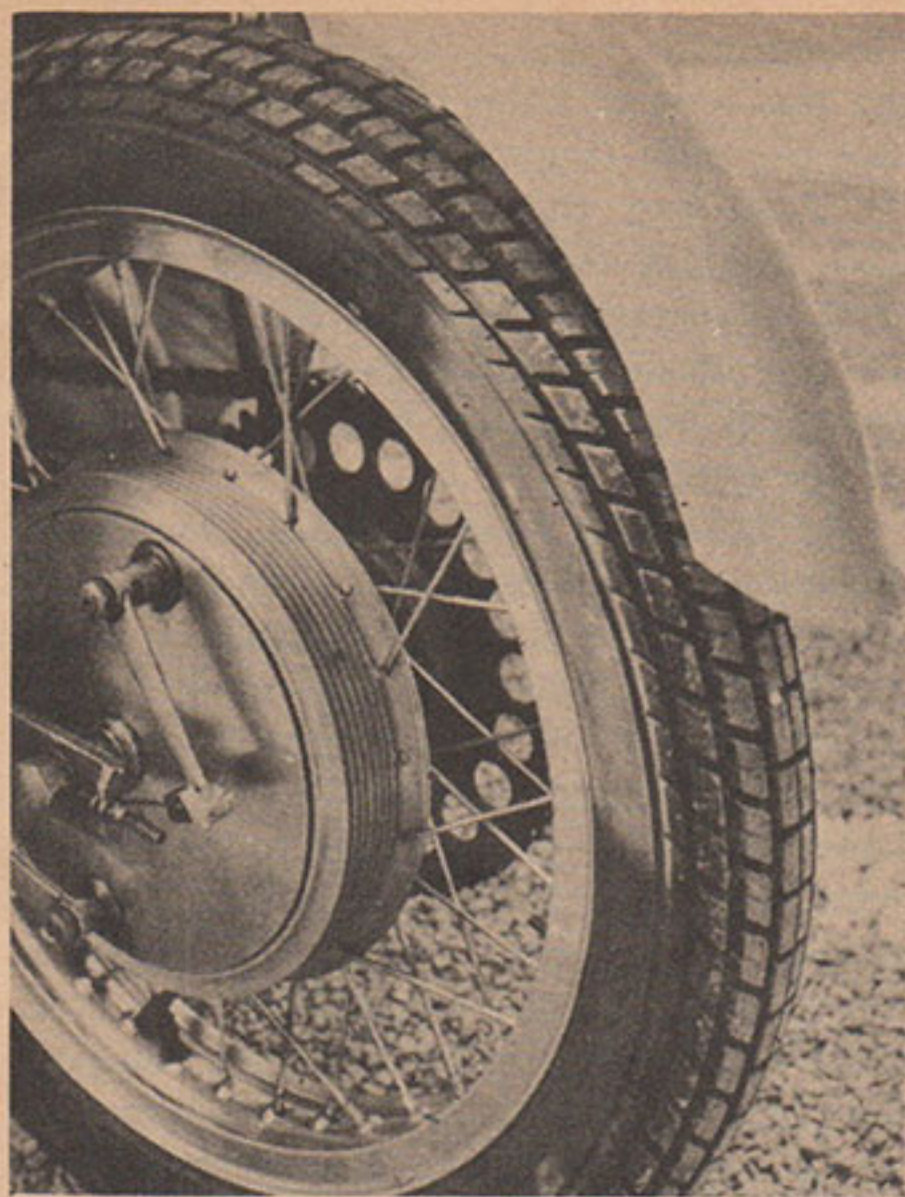
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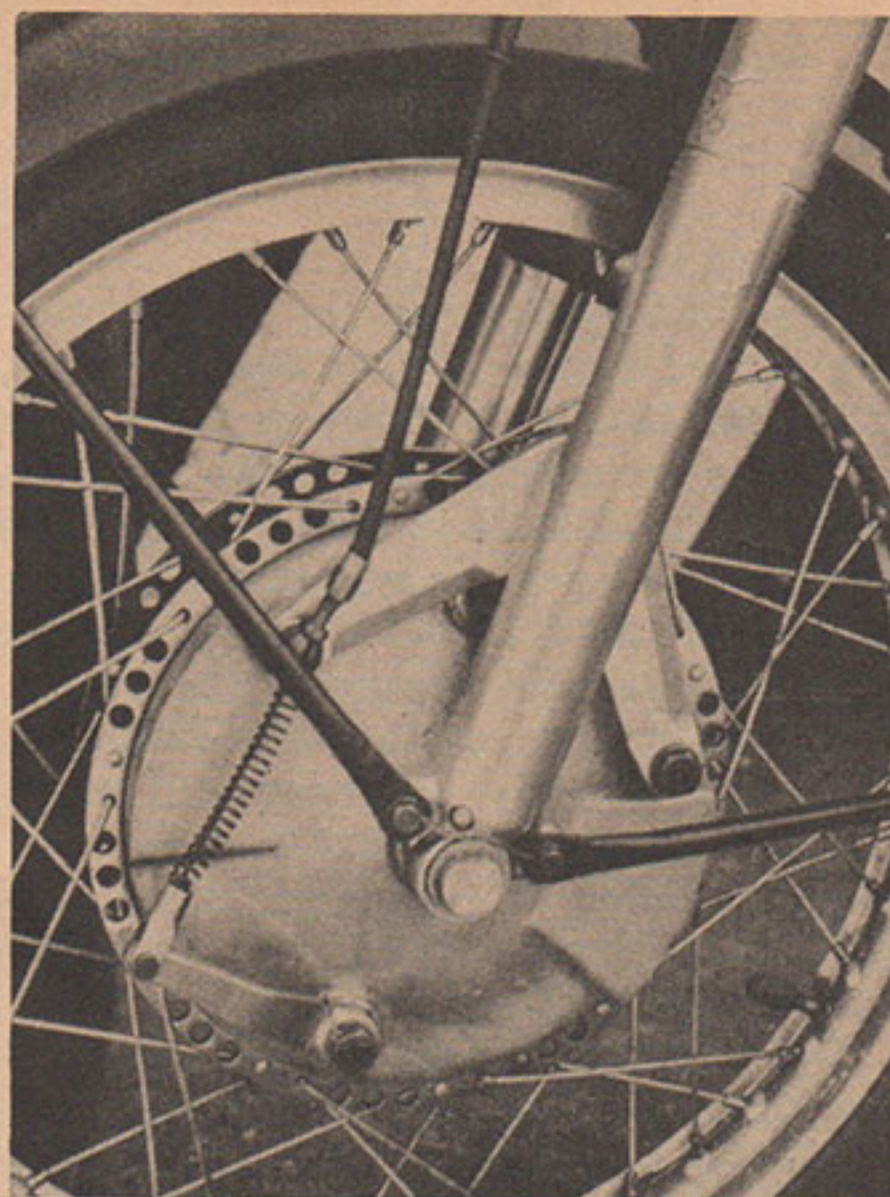
Ted A. Johnson, Business Manager
Sworn to and subscribed before me this 1st day of October, 1952.

(SEAL)

Phyllis M. Avedon
(My commission expires August 20, 1954)



The new Dunlop racing profile, appearing on the rear wheel of Les Graham's Italian MV. Tread blocks have been extended half-way down wall of tire to compensate for extreme banking



Very neat front fork of the 250 cc, dual overhead cam Moto Parilla. Brake backing plate is anchored by an inverted V-shaped bracket. Full-width drums are side-cooled by two scoops

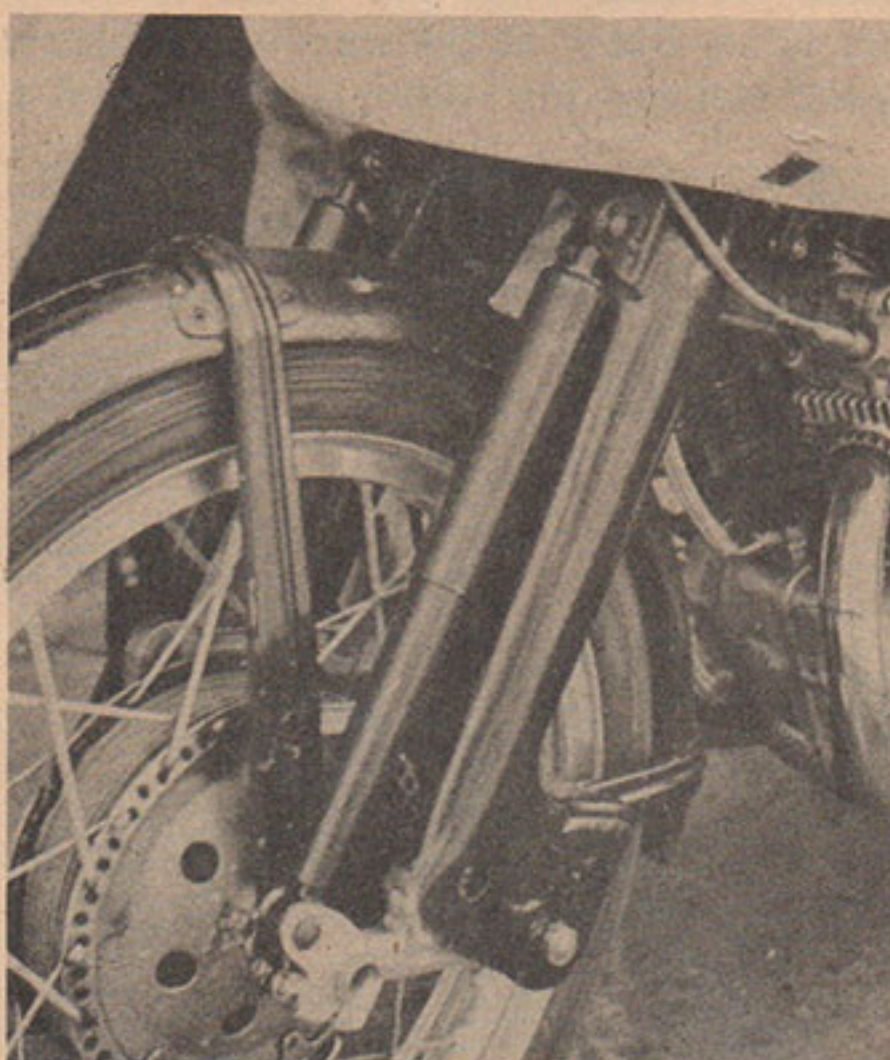
MONZA GRAND PRIX

(Continued from page 31)

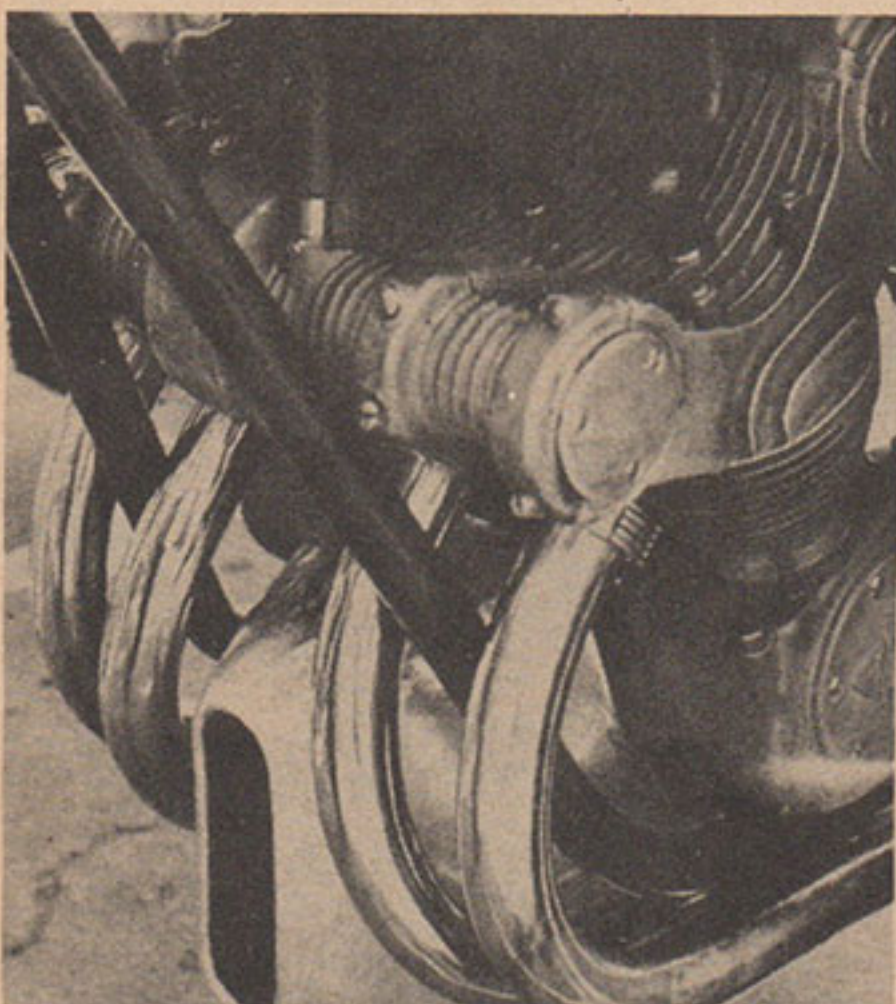
500 cc solo event; Les Graham, MV, soon had a 15 second stretch on the nearest machine, a Gilera, and other top soloists who trailed by as much as 49 seconds. Fastest lap: Graham, MV, 2'10.3"—108.1 mph.

In the week before the Grand Prix, the new four cylinder Guzzi with cardanic drive and the cylinders and crankshaft running parallel to the drive shaft (rather than transverse like MV and Gilera) was tested at Monza. It was not shown during the official training and was not entered in the big race. Had it been, we wonder if Graham's fastest lap at a terrific 108 miles per hour might not have been bettered.

The drive for power is definitely on. Never before have we seen such a frantic play for power and speed. The battle of singles versus multies still wages. Does the new Guzzi four carry the answer?



Modified front fork and new shock absorber of NSU 250 twin. This swinging link action is quite popular but seldom used with such long shocks



One of many innovations used by Gilera to control cooling on their transverse fours. Look closely at the joint in the frame, just below tank, for an idea of thickness of tubing

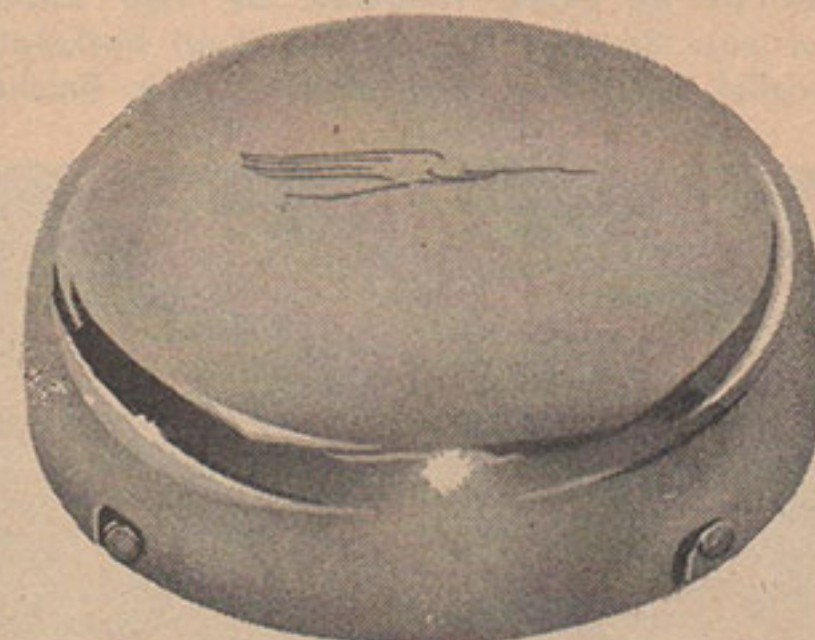


In their frantic search for just one more iota of speed from their 125 cc model, NSU has enclosed almost a third of the front wheel in a shimmering, bulbous hood. No attempt is too remote

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SIX-DAY SHOWDOWN

(Continued from page 16)

Motoren Werke.

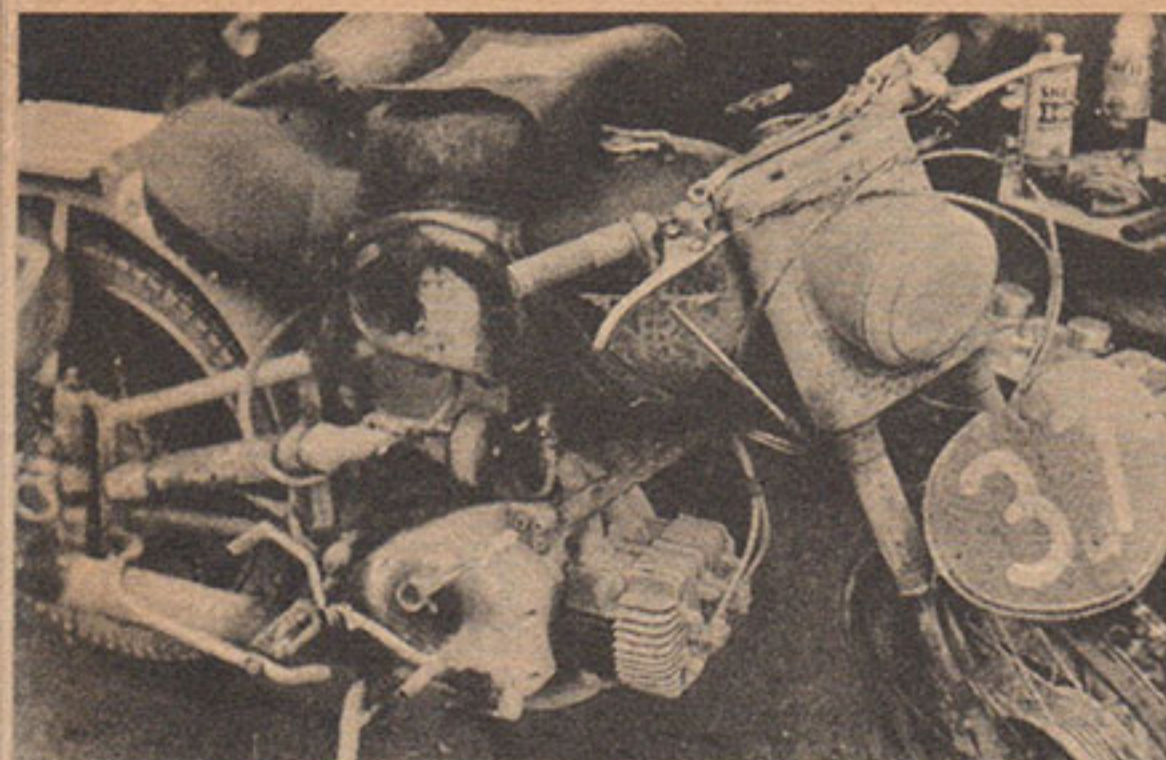
A second Britisher in the Trophy contest retired during the fifth run; P. Alves, Triumph, having to throw in the sponge with gearbox trouble. The Czech team, on the other hand, had a trouble-free day. This left them so far in the lead that the whole five could afford to retire during the last day's run, yet still be sure of the trophy. The Vase struggle, on the other hand, was still going strongly. Germany still maintained a clean sheet after five days' troublesome riding, but running closely behind were Czechoslovakia with 12 marks and Holland with 44.

Rain was still falling when the remaining contestants set off for the one hour speed test that was held after covering a route of 70 miles. Again, several contestants had trouble in starting and a few were forced to retire during the relatively short run. Even the hour test gave the unexpected. Hans Roth of the up-till-then clean German Vase trio failed to bring life to his BMW at the start of the hour's speed test and his failure to do so, cost a

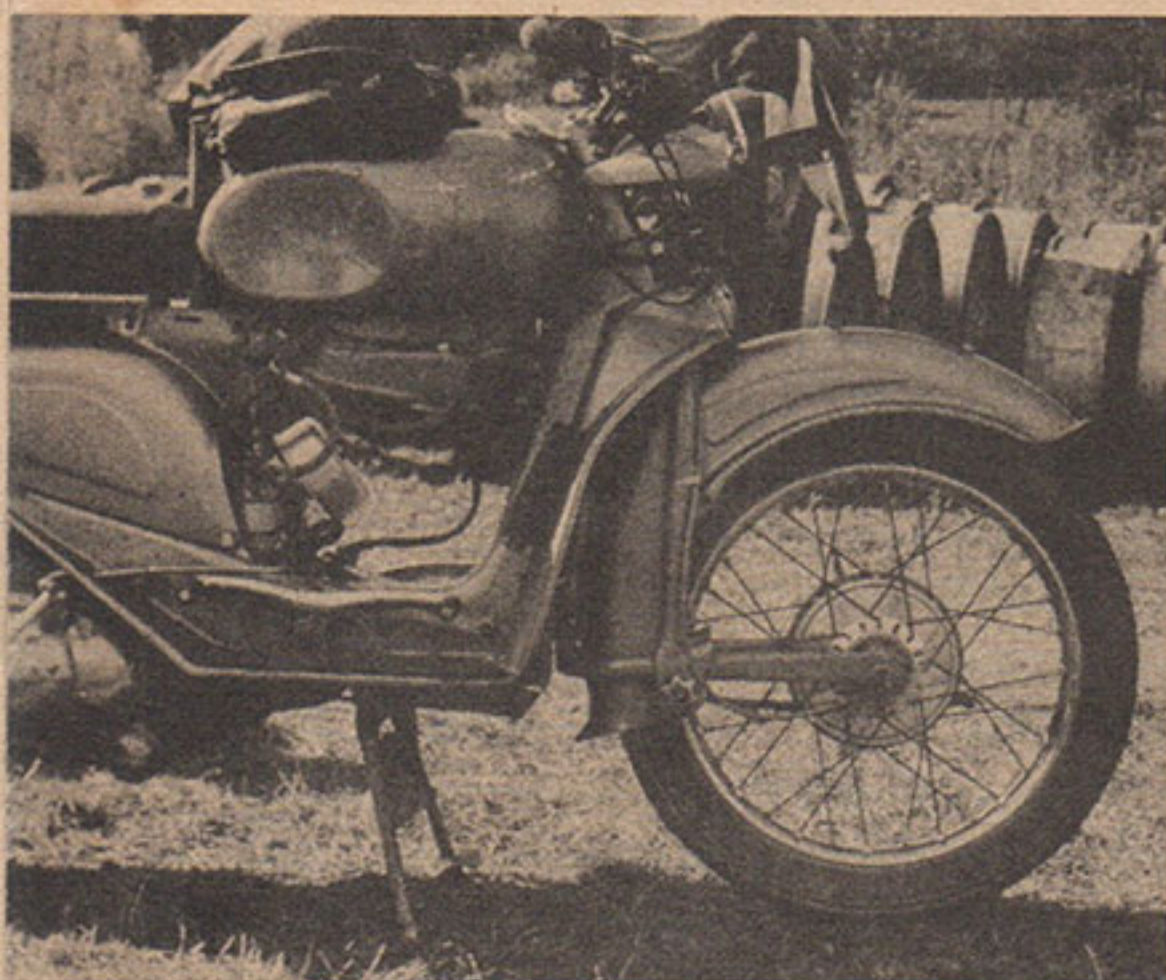
dramatic 60 marks; one for each minute he was absent from the course. This was not the only tragedy for Germany, either. G. Zalle had, that morning, failed to obtain a spark from his machine, and with that catastrophe departed the last chance of any manufacturer gaining an award, probably for the first time in the history of the event.

As though to make amends, fate smiled throughout on Germany's club teams and three of them finished without a black mark against them, but this could hardly atone for the loss of a trophy awarded in the faster time limit. Nonetheless, all concerned take off their caps to the Czechs, who by gaining both Trophy and Vase repeated a feat that country managed in 1947. Only two other countries have completed the double since the Vase competition was instigated in 1924. Germany did so in 1935 and Great Britain holds top score with a total of nine.

Have we then, in saluting the champions, decided the future trend of the motorcycle? Does the speed of the multi outweigh the properties of a single or, has the victory of the Czech 248 and 148 CZ machines proved the reliance of the small two poppers?



Italian Rumi 125, following the final speed test, was encrusted with dirt which necessitated use of very hot plugs. This was the fastest bike in its class, followed by two Puches and one German Maico. The Rumi horizontal parallel twin had five starters, one finished

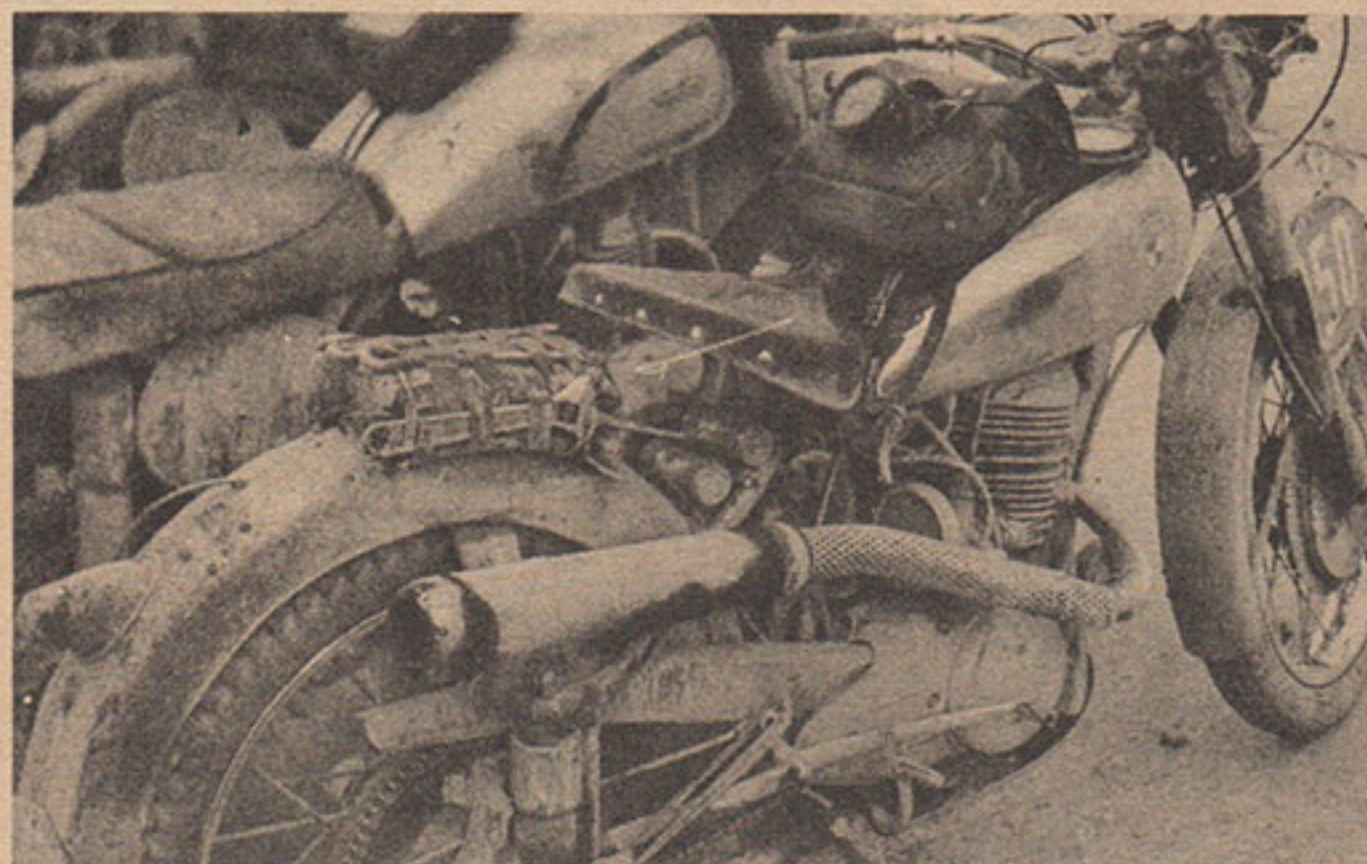


ABOVE, Very unconventional front suspension of the Italian Aermacchi 125 cc, four of which started the six-day marathon; three finishing. Cylinder cooling, under floorboard, is excellent

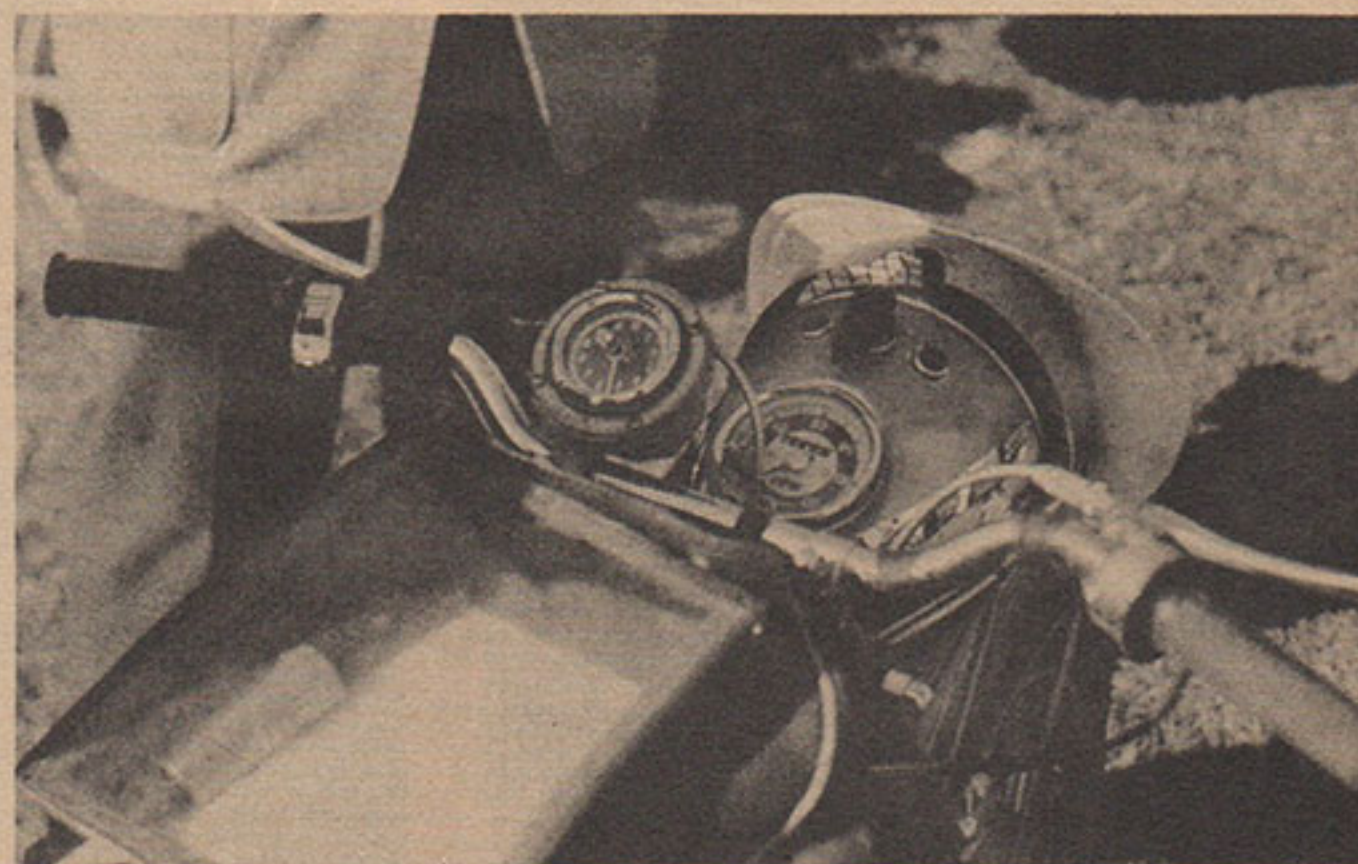
RIGHT, Several women also competed. The well-known Olga Keveloes rode a beautiful Italian Moto Parilla 125 but retired on the third day



FAR RIGHT, Probably the most determined lad in the race against time was Karl Devoty of Austria whose right handlebar broke completely off on the third day out. With the broken bar taped to the side of the tank, Karl continued for three days more, steering only by the left bar, operating the throttle of his Puch from awkward position between the tank and his knee



Dutchman, Ap Koning's 250 cc Puch completed the entire distance, losing only one footrest. Note rubber band keeping rear brake zeroed in. Model had two coils below saddle, tools handily disposed on rear fender, knapsack secured to tank by straps and yolk around filler cap



Basic necessities for the trial included time clock, tank-mounted bag for spare parts, plastic container for cards and timetables. Maps were less essential, for route was excellently marked. Discipline of the Austrian hosts was marvelous; busses, cars and spectators pulling aside for riders

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TRIUMPH TROPHY TRIALS

(Continued from page 21)

the machine as it is delivered. The side stand swings completely clear of all harm and still offers a steady foot when it is down, is instantly accessible when seated.

INSTRUMENTS AND CONTROLS

Like the majority of imported machines, Triumph employs the Smiths speedometer which, while undoubtedly a fine instrument, we found to be quite susceptible to vibration. At first, the trip mileage set of figures would stick on the 9s (9, 19, 29, etc.) at speeds above 50 mph. This remedied, several months later, the complete row of trip mileage figures would stand still at high speeds. The speed indicating hand and total mileage group seemed to function perfectly, however, with the exception of a 10 mph error at top speed.

Although little electrical troubles have developed outside of a discharged battery, it is noted that all wiring is delicate and susceptible to damage because of the manner in which it is draped upon the machine. A likely recommendation here would be the use of appropriate conduit to house the long strings of hanging wire.

Triumph's novel oil gauge, positioned at the bottom of the primary gear case, is actually an extension of a spring-loaded plunger which works directly off the main oil pressure line to the engine. With the engine running a little above an idle, the plunger should be out and resist any efforts to push it back in. If it fails to extrude with the engine running, you're either in trouble or the plunger has been accidentally bent and caused to jam.

Brake, clutch and foot shift levers are all well positioned and completely adjustable. Both brake adjustments can be made in a matter of seconds merely by dialing them in with the large diameter knurled adjustment nuts. Brake action, front and rear is absolutely perfect. Leverage on the front brake has been figured so precisely that full pressure at the lever causes the tire to squeal on pavement just short of locking up tight. The action is smooth, progressive and positive; the same applying to the rear binder. While the choke and spark controls may be required under other circumstances, this machine was such an easy starter, it was found unnecessary to use either lever and removal of the spark control is contemplated.

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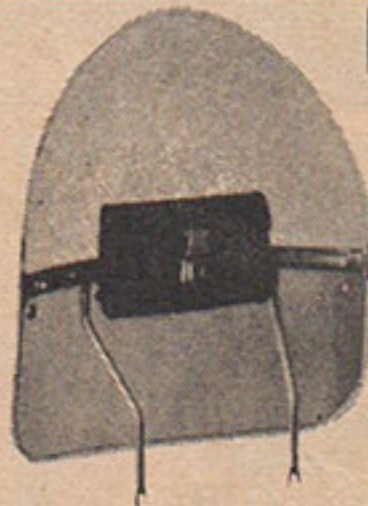
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HEADED FOR YOUR GARAGE

(Continued from page 33)

The little Bantam gamecock, small, yet capable of providing a group of its own, has already crowed to some great purpose all over the world in both sporting and touring spheres. In the future, an unsprung, unvalanced front fender, carried from the lower end of the telescopic legs, will move in unison with the wheel. Big end assemblies will gain increased life by the fitting of 3/8-inch-long rollers.

Mention has not been made of spring frames or buddy seats except that they are optional on all models to which such fittings are not standard. Many other extra fittings for various models can also be had by application, including special cams, gears, pistons and what-have-you that will enable the Gold Star models to compete in all the varied spheres of sport.

DOUGLAS

Britain's only transverse twin motorcycles from the Bristol factory will be almost unaltered in the coming season. Featuring torsion bar swinging arm rear suspension and "Radidraulic" bottom link forks, a three model 350 cc engine series will continue to be supported by the 125 cc Douglas-Vespa scooter.

The use of external pipes between the oil pump and crankshaft will make it possible to include an oil filter in the lubricating system of the listed three models: the 348 cc Mk V, 80 Plus, and 90 Plus.

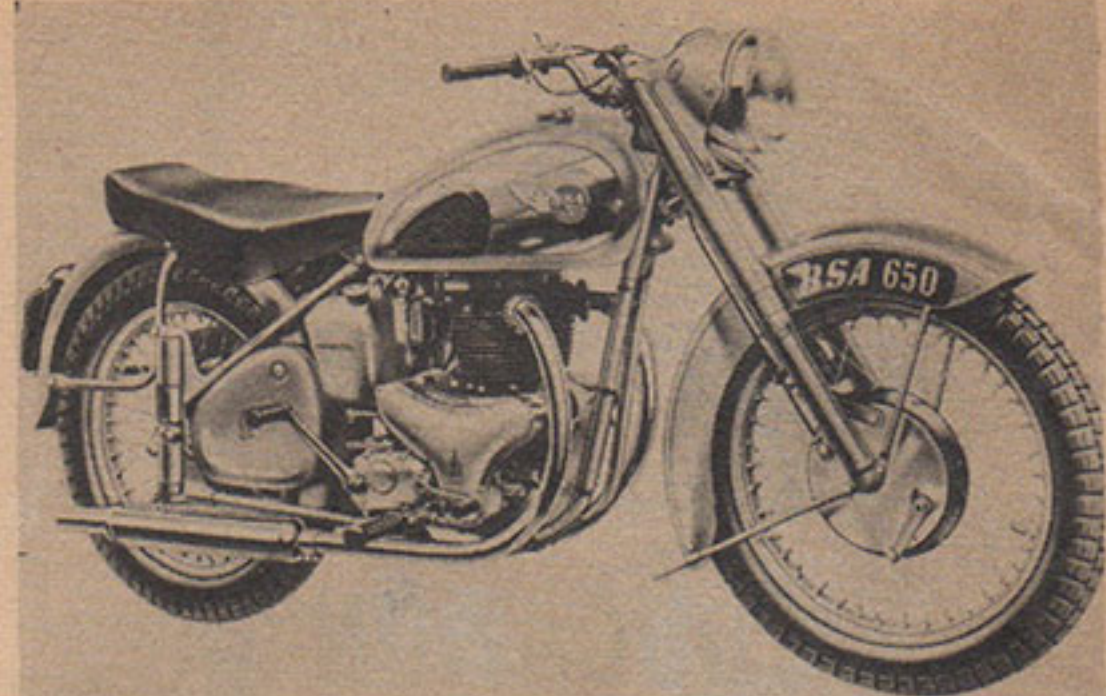
Main differences between the touring and the two sports models are those of brakes, gear ratios and compression figures. The 7 in. front brake of the Mk V is increased to 9 in. for both Plus models. Gear ratios of 5.86, 7.42, 10.0 and 16.3 become 6.17, 7.78, 10.58 and 17.14 in the Plus 80. The Racing Plus 90 pulls track gearing with ratios of 5.7, 6.68, 7.79 and 11.48 to 1. Compression ratios are 7.25 for the touring, 8.25 for both Plus models.

NORTON SPRINGS A SURPRISE

Details of the complete Bracebridge Street program are not yet known. Those pertaining to the camshaft models are to be disclosed at a later date. In the case of the seven known, prices are reduced despite many alterations and improvements. Four single lungers, rating 490 cc, two twins of 497 cc and a thumping sidevalve of 596 cc serve to make the total; all, except the 490 cc competition model, altered to varying degrees.

Most noticeable modification is the rear suspension system of the 490 cc OHV Model ES2. Swinging fork has replaced the plunger system with the result that the rear end greatly resembles the former Manx Racing Models. The new feature also graces the 497 cc Dominator Twin although American readers will possibly pop for the Dominator De Luxe with the racing frame.

Controlled by hydraulically dampened telescopic legs, the freshly introduced system permits a 3 1/2 inch movement as the fork members pivot on Silentbloc bushes.



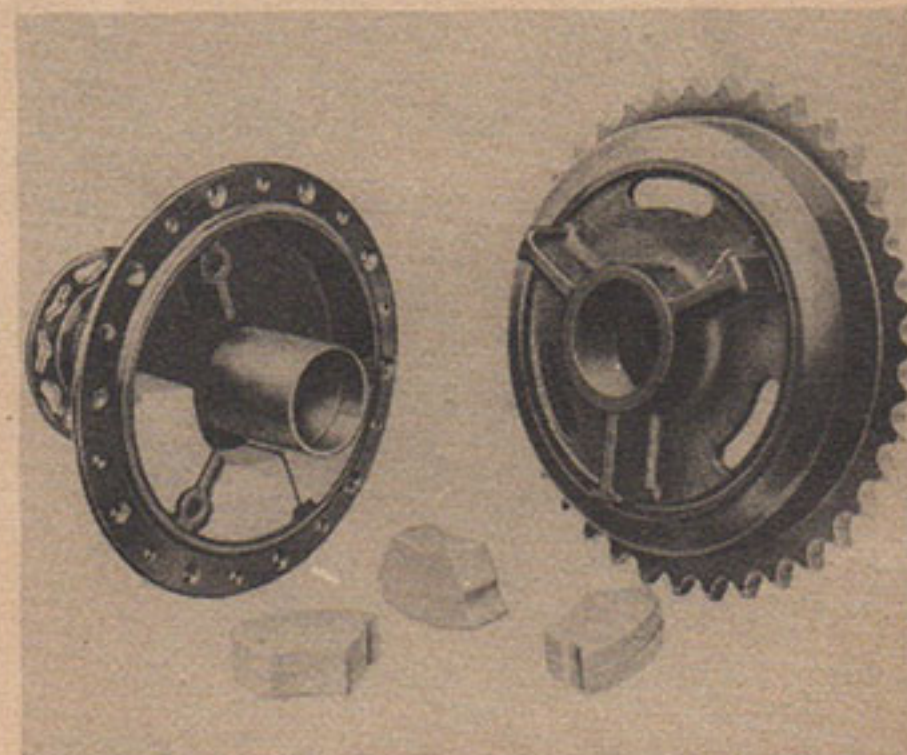
BSA's 1953 models, from the 250 cc size up, will feature streamlined headlight cowling of pressed steel, housing speedometer, light switch, ammeter. License plate bracket is redesigned

Partly supported by new lifting handles, a deeply valanced rear fender, topped by a neat comfortable Buddyseat, provides that look of strength to the complete assembly. A quickly detachable rear wheel is released by the removal of three nuts; the chain and brake remaining intact.

Stack and muffler are also changed. In the future a 1 5/8 in. ID header will provide greater power at low revs and a bulbous muffler improves silencing. Less important but quite welcome improvements to this and other models in the range include a stop and tail lamp in combination, built-in pillion footrests, larger toolbox and, for the ES2 alone, a 43 tooth rear wheel chain sprocket.

Both twin cylinder machines undergo modification in rockerbox lubrication. Supply to the assembly is from the scavenge side of the oil pump and a spring loaded valve included in the return system will ensure adequate supply. The "Featherbed" Dominator De Luxe, Model 88 has a neater front end appearance, the valanced fender of last season is now replaced by one of normal Norton pattern which, unsprung, is fitted to the static fork members. Additions made for improved riding comfort are rubber bushes to handlebar mounting and light kneegrips on the racing type gas tank. The standard Dominator, Model 7, with the exception of the engine unit, follows the line attributed to the ES2 with all its modifications in frame design and seating.

The four models remaining have rigid frames; model I8 being an unsprung ver-

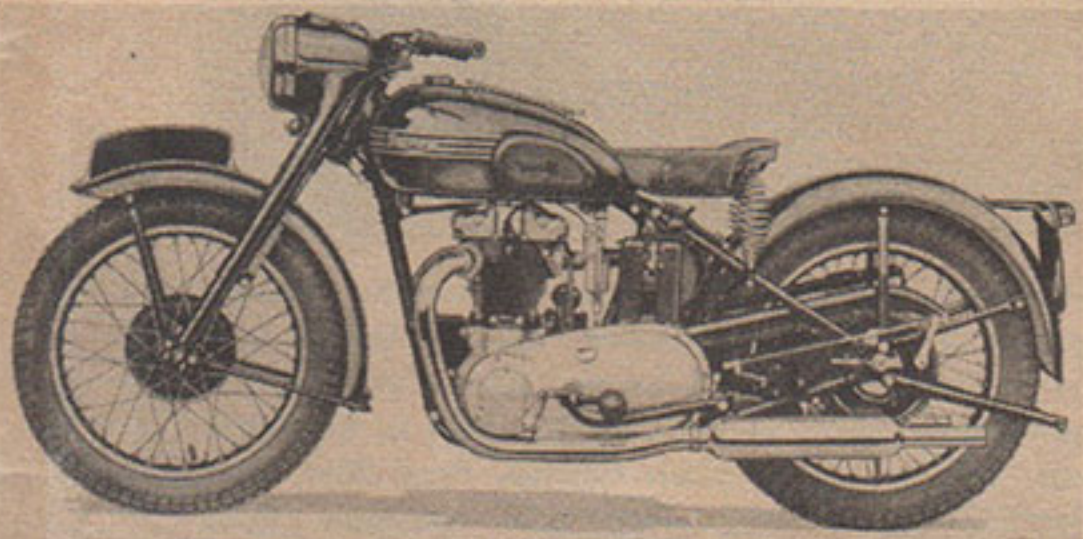


Enfield's cushioned hub uses rubber blocks to relieve strain on chain imposed by harsh acceleration and braking. This, plus engine sprocket shock-absorber, smooths out the power impulses

sion of the ES2. Model 16H and the "Big Four" are sidevalve jobs. Of 490 and 596 cc in order, they are primarily designed for sidecar work. Except for a new tail lamp detail, they remain unchanged. Also unaltered, the light alloy competition Model 500 T completes a range to be marketed in the well known Black and Silver from Bracebridge Street

TRIUMPH

Though not laying claim to being the

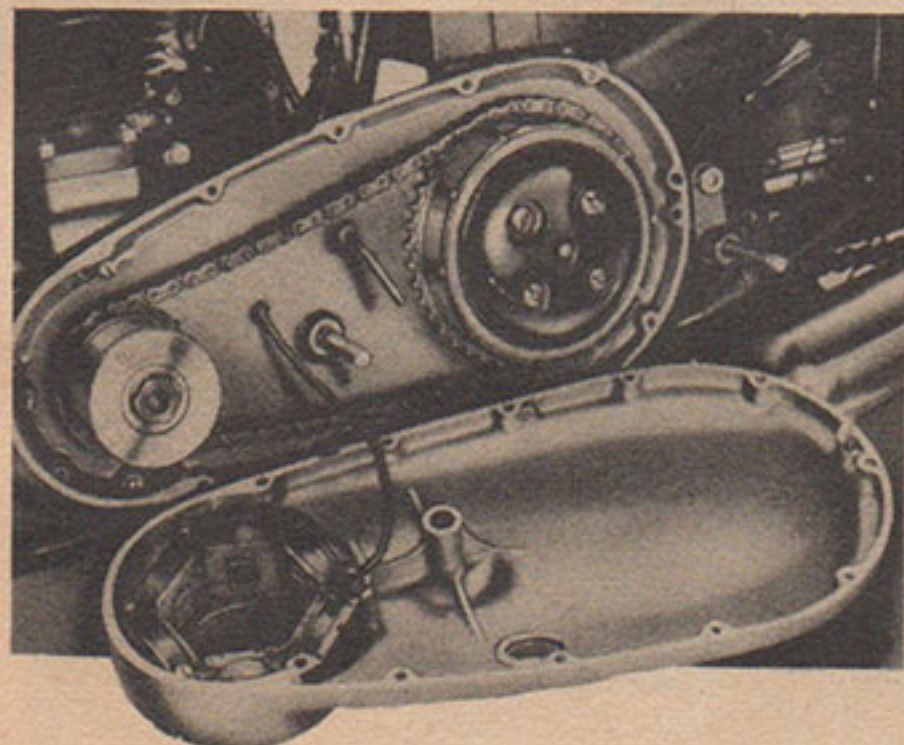


New rear number plate stoplight will grace the stern of '53 Triumph line as well as several other makes. We hope that it will meet with U.S. legal code, one of CYCLE'S pet peeves

first concern to introduce the vertical twin motorcycle engine, the Coventry concern began the present popularity of the type fourteen years ago. It introduced a machine that, having undergone modification from time to time, is still in production. It is, without question, the machine used by more public bodies and police forces all over the world than any other model. So great a tradition demands continuity and, with a major alteration in the lighting and ignition the "Speed Twin" will remain available for 1953.

There will be little change in the other already well known Triumph machines though a second version of the Tiger 100 will be produced. Known as the Tiger 100C, it is in effect a road racing machine and will replace the conversion kit offered for the Tiger 100 in the past. Despite this, the conversion components remain available to those who wish to convert the standard model.

Completely assembled for the highway with lighting and mufflers, the newcomer differs by having smaller diameter stacks, racing cams and pistons, twin carburetors with remote chamber mounting, a large



Forward end of primary chain case will house Triumph's newest A.C. lighting-ignition system. A flywheel generator, with its rotor carried on the engine shaft, eliminates bearing drag

one gallon oil tank and racing type bars and footpegs.

The switch to an A.C. lighting-ignition system on the Speed Twin has caused slight alteration to be made in both primary chaincase and headlight design. The forward end of the primary case will house the new system; a Lucas 55-watt flywheel generator with its rotor carried on the engine shaft. Conversion of the alternating current to direct current for battery charging is performed by a two plate rectifier beneath the saddle. Immediately behind the cylinder block, in the position formerly held by the magneto, a distributor embodying automatic advance and retard control, topped by a high-tension coil, provides necessary high tension current. The headlight nacelle, in addition to housing speedometer and ammeter, carries two switches, ignition and lighting respectively. The former, operated by an ignition key, has two "on" positions. One, the emergency position, switches the entire out-put current to the ignition system so that the machine may be started easily even if the battery be either flat or low. Similarly, the light switch in its respective positions connects with additional stator windings to step up generator output as required by load.

It being impossible to fit the erstwhile shock absorber to the engine shaft, a new type rubber absorber is incorporated in the clutch. Other than this, with the exception of a new rear number plate with rear-stop light combined, the Speed Twin retains its pleasing lines and well known paintwork. This is not surprising, for the factory no longer enters each new season with a list of models, but modifies its machines as occasion demands.

Available as extras, though standard on some individual models, a list of features includes: the Triumph spring-hub, buddy seat, pillion footrests and seat and the Triumph pattern prop stand.

The complete range available for 1953 will all seem familiar. The 649 cc Thunderbird in its shade of blue. The two Tigers and competition Trophy in silver grey with black frame and forks.

VINCENT

The latest Vincent machines have been fitted with new type brake and clutch linings, said to be unaffected by oil and, in the case of the brake linings, almost impervious to water. This slight modification will prevent clutch slip that, in the past, has been caused by over filling of the gearbox or chaincase.

This, together with slight gearbox modification are the only alterations made to a range of four models that have been reduced in cost. The previously built-up selector arm and ratchet-shaft assembly are now one piece forgings and the gear change pawl is redesigned for a positive stop.

Small details were admitted, but already the Vincent range embodies the finest points possible in motorcycle design that permit the manufacturer to advertise one machine as the world's fastest standard motorcycle.

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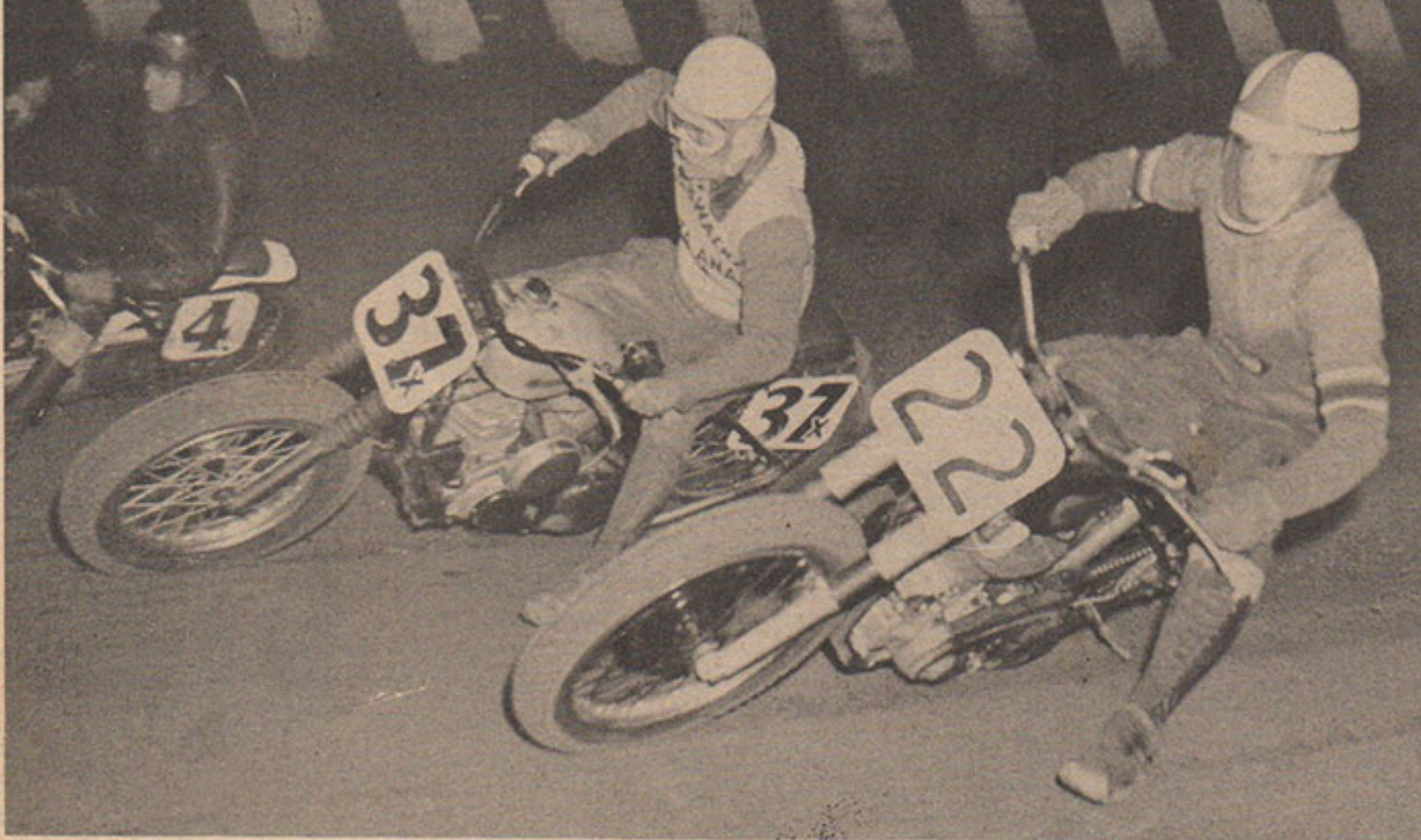
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The WORLD at a glance



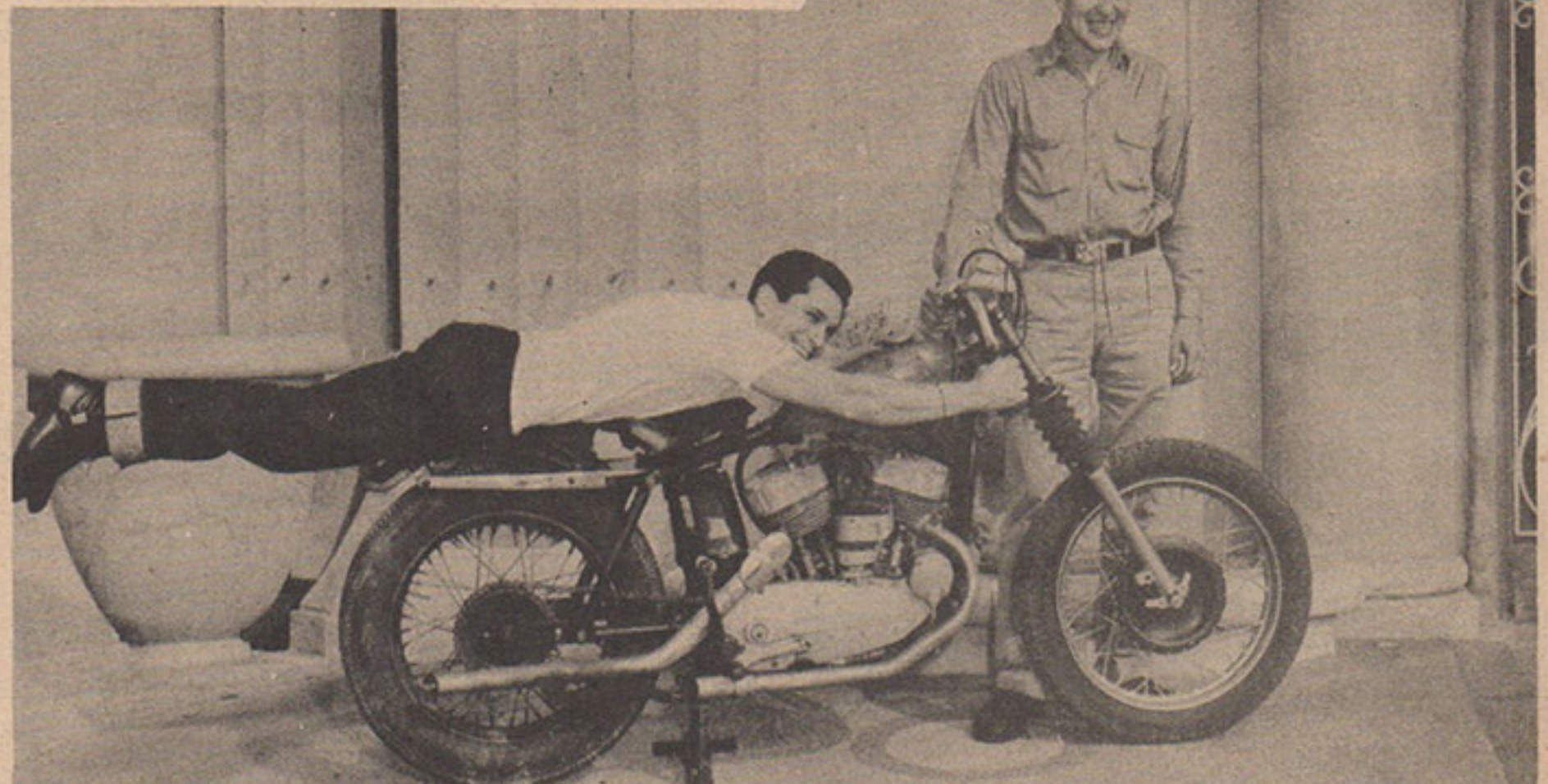
How's this for a string of accomplishments? Johnny Gibson, latest protégé of Clarence Czynsz, has hung up a string of wins from Riverside to Tulare that would choke a promoter. Out of 37 starts, Johnny toolled his screaming Norton single into 24 first places (Aug. 10 to Sept. 20)



World Champion bicycle racer, Verschueren, of Belgium, hangs draft on an ancient pacing motorcycle. Bars are intentionally long to keep driver's arms at side for better wind-breaking



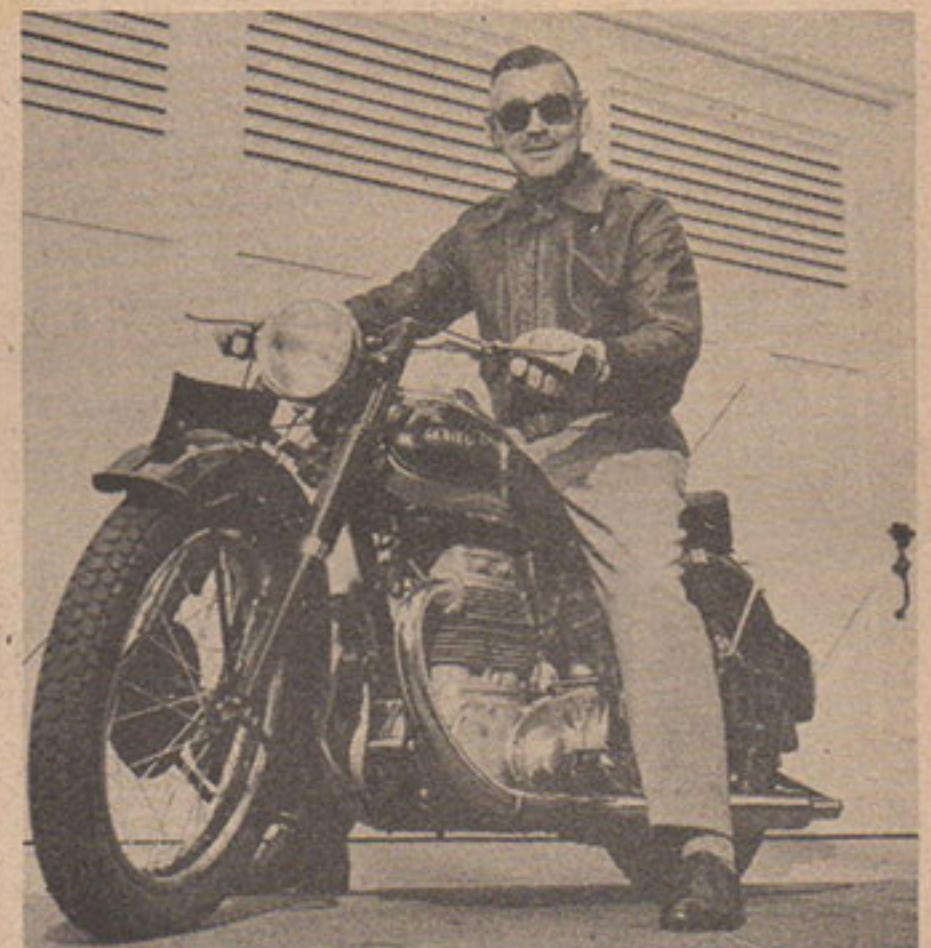
Flanders, take a look at those bars! First-place man in the Texas State Championship Endurance Run, Eldon Beer, can steer you right when it comes to covering rough ground. He herded his K-model Harley through the big stampede with a loss of only 61 points



"This is the way we blew 'em off," says Al Keyes, rider of the K-model Harley-Davidson that spun the clocks of ill-surfaced Rosamond Dry Lakes at 128.11 mph during recent Glendale M/C Speed Trials. Bob Akers, standing, keeps it buzzing with a factory kit, reworked head, barrel and carburetor. Quick-change rear shock has been replaced with a rigid bar for track work



The men, the machines, and the trophy. Photographed with the Maudes' Trophy which has been awarded to BSA by the Auto-Cycle Union, governing body of motorcycle sport in England, are, left to right: Brian Martin, Fred Rist, Bert Perrigo (team manager), and Norman Van-house. The trophy was awarded to BSA for the most meritorious observed motorcycling performance of the year, which consisted of a 4,958-mile officially observed road test through nine countries, and included full penalty-free participation in the International Six Days' Trial



MGM star Clark Gable is a bike fan from way back. In addition to sports cars and even a hot rod, he has owned several cycles, including this beautiful Ariel square-four and a "61" Harley

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