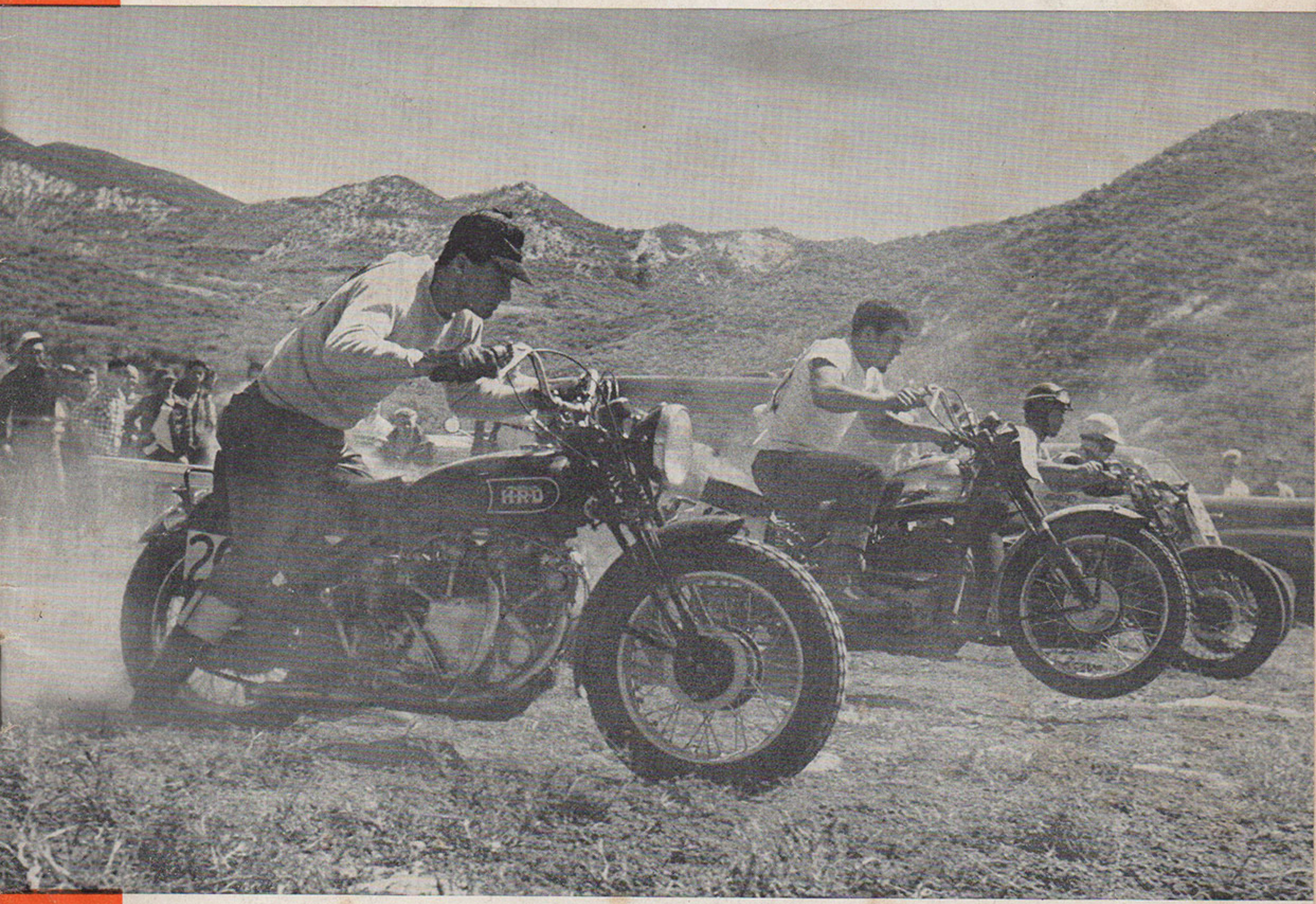
CYCLE

JULY 1950
TWENTY-FIVE CENTS

In This Issue:

- CATALINA—ANOTHER ISLE OF MAN
- TUNING THE MOTORCYCLE ENGINE



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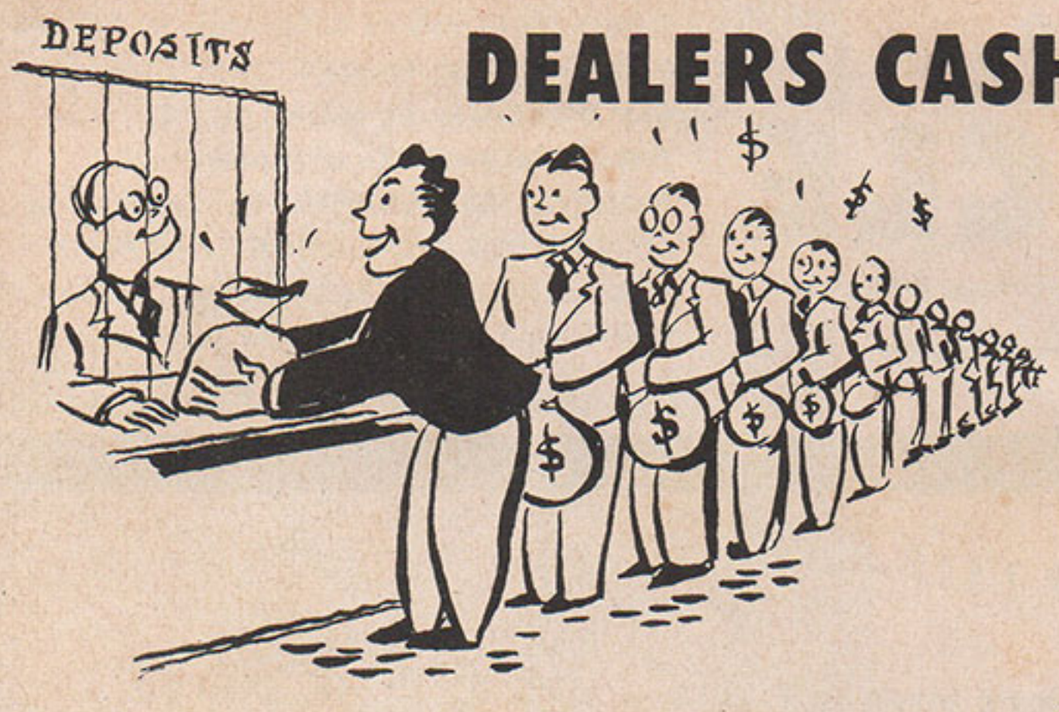

DEALERS CASH IN ON THE GREAT ARIEL

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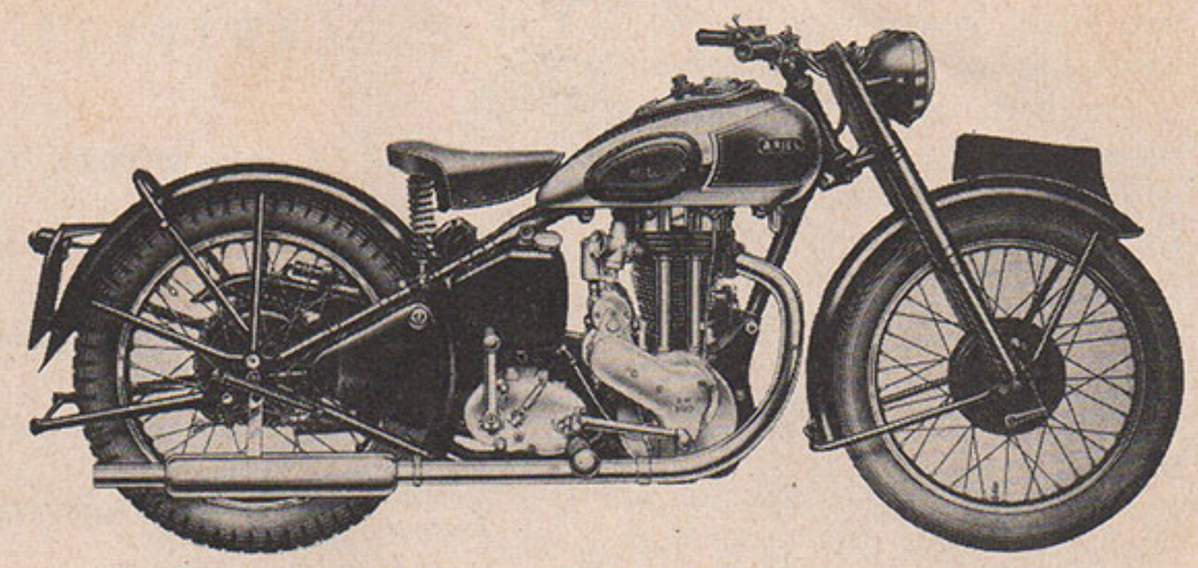

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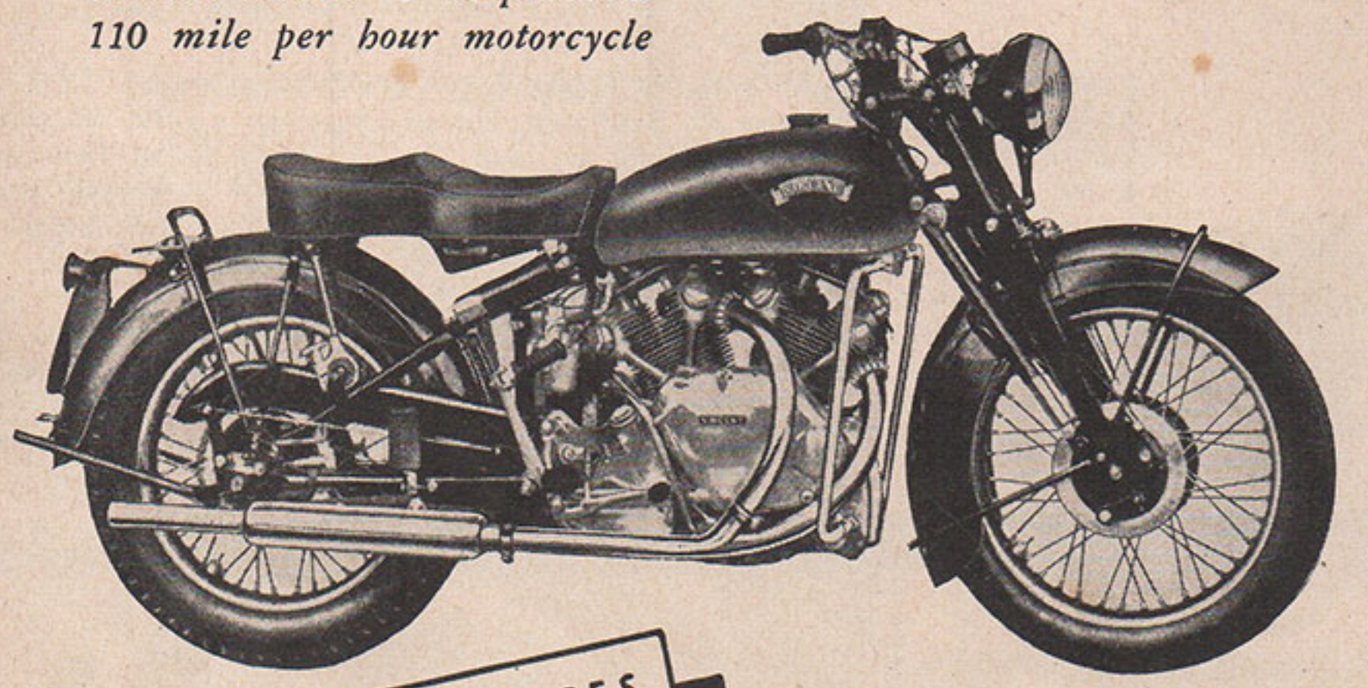

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SPRINGFIELD, MASSACHUSETTS

JULY 1950

CYCLE

"A World of Motorcycle Information"

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Editor's Viewpoint

THIRTY to thirty-five years ago in this country motorcycle racing was very popular. Public attendance at race meets was high, numbering in the tens of thousands of spectators. Innumerable tracks, both dirt and board, drew consistently large "gates." Factories sponsored large teams of professional riders for the purposes of advertising and publicity. Motorcycle racing was an accepted form of entertainment.

Today, although the population of the country is vastly greater, spectator interest in this form of entertainment has dwindled to a miserable "low." Average attendances now are in the neighborhood of 3,000-5,000 per race meet.

The opposite condition prevails in foreign countries. Early Continental and British races were poorly attended, fans rarely numbering over 10,000 to 20,000. Today motorcycle race attendance has reached astronomical proportions—50,000, 100,000, 200,000, depending upon the magnitude and importance of the event.

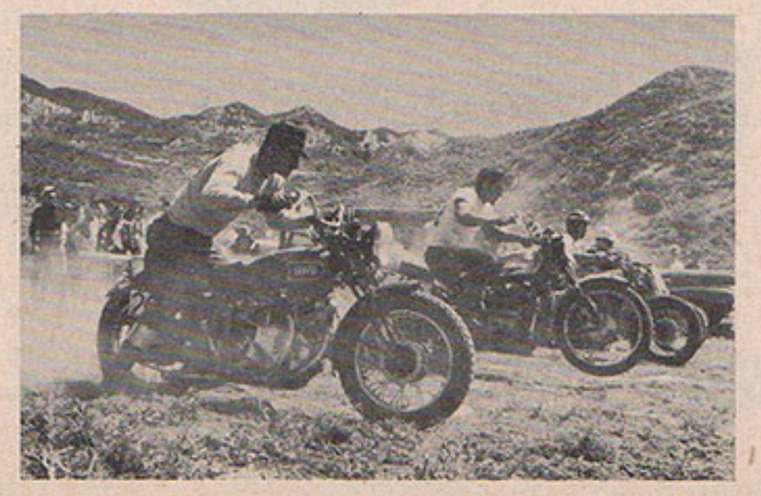
One main factor which has contributed to lessened "gates" in the U.S. and increased "gates" in foreign lands is the matter of APPRECIATION of the skills and techniques of competing riders. The great majority of the U.S. public cannot understand these acquired abilities, therefore they place little importance on them.

People in Continental countries and in the British Isles become acquainted, early in life, with two wheeled vehicles, either bicycles or motorcycles, as a matter of course. Streets and roads teem with bicyclists and motorcyclists using their vehicles as a regular part of their daily lives. Early acquaintanceship leads to ultimate participation and eventual ownership. At once it becomes necessary to develop a keen sense of balance and the sharpest of reflexes. Motorcycles demand these attributes in every rider.

Man is constantly comparing himself with other men. Riders in foreign countries possess motorcycle riding abilities which they unconsciously compare with the same abilities of other riders. They become highly skilled in discerning between poor riders and top grade riders.

How can the American public be made to APPRECIATE motorcycle riding skill? If and when it does, motorcycle racing will once more become a national form of entertainment.

CONTENTS



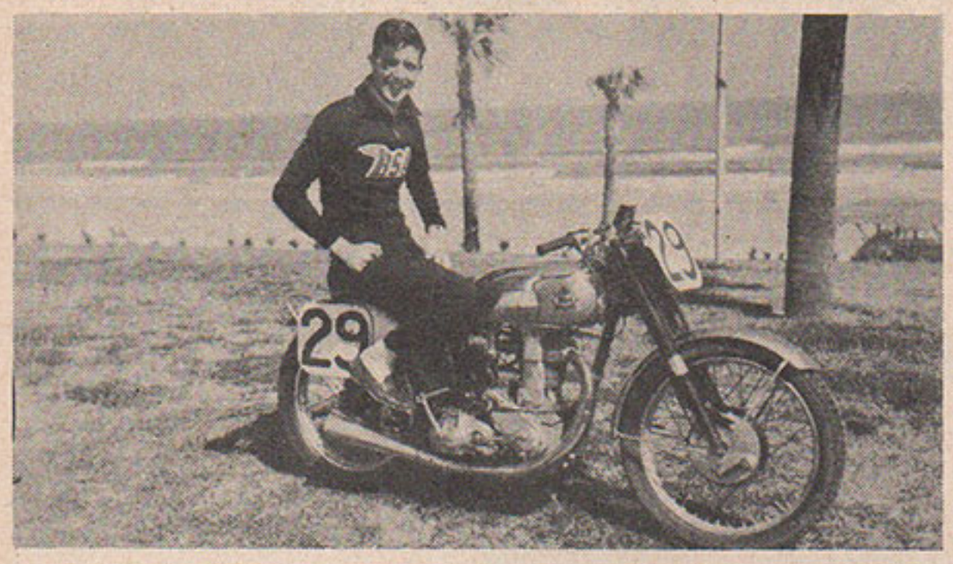
ON THE COVER

Photo by Al Long

We have a little confession to make about this photograph. Our cover caption infers that the scene depicts a Field Meet drag race. In reality it shows four riders taking off in an English-type speed hillclimb held recently near Los Angeles. Tex Luce is attempting to convince the Vincent HRD "to get goin'—time's a-wastin'"

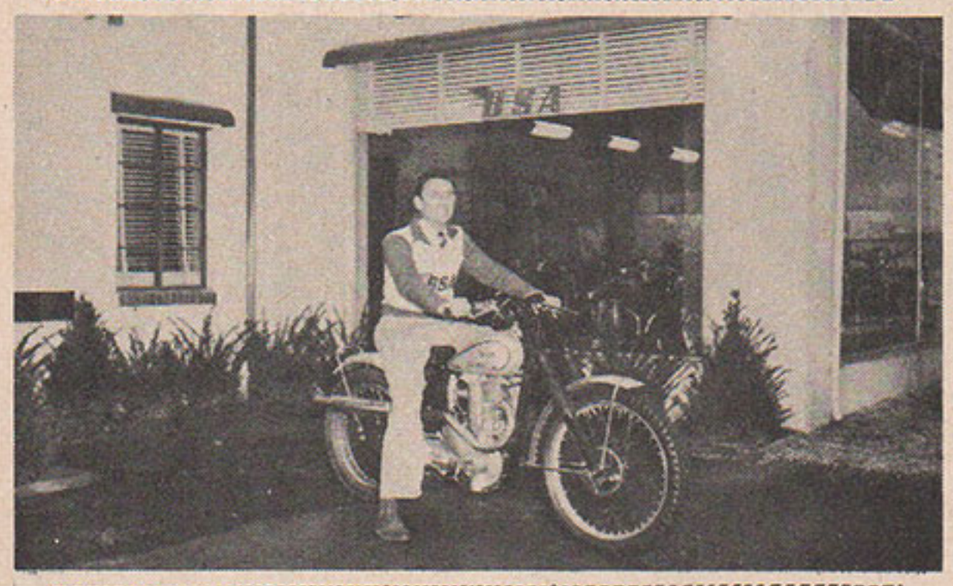
MOTORCYCLING IS THRILLING!

Whether you convert your machine for the track, or ride it with full equipment in a road run, nothing will give you a greater thrill than the performance of your "Beeza!"



MOTORCYCLING IS FUN!

Everywhere enthusiasts, old-timers as well as beginners are turning to BSA. Motorcycling is a healthy, safe and exciting expe-rience! TRY IT!



MOTORCYCLING IS PROFITABLE!

For those of you who are so enthusiastic about cycling that you contemplate going into the Motorcycle Business — Write to either of the BSA-Sunbeam Dis-tributors and get details how you can operate a profitable business in your home town.

BSA

Leads the Industry with

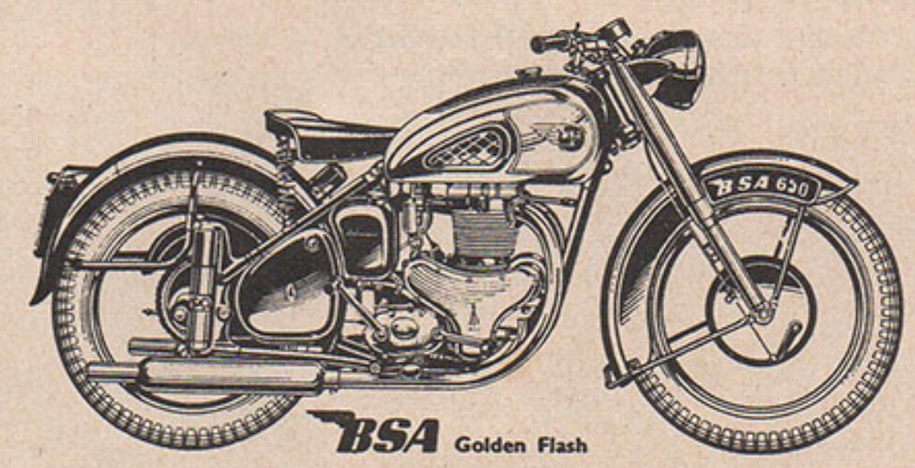
22

Different Models!

No other manufacturer of quality motor-cycles has made such a concerted effort to offer the American Rider such a complete line of motorcycles. From the 125 cc "Bantam" through the deluxe 500 cc "Sunbeam" to the 650 cc Vertical Twin "Golden Flash" every rider's choice can be satisfied.

B. S. A. — the world's largest producers of quality motorcycles, now have over 400 authorized dealers from coast to coast, headed by two experienced distributors whose up-to-date headquarters are stocked with all models as well as ample replace-ment parts and spares.

For the dealer who wants to be able to offer his riders "the most complete line" of motorcycles, plus the assurance that he will be able to meet all their service require-ments, there's only one answer — BSA



BSA Golden Flash

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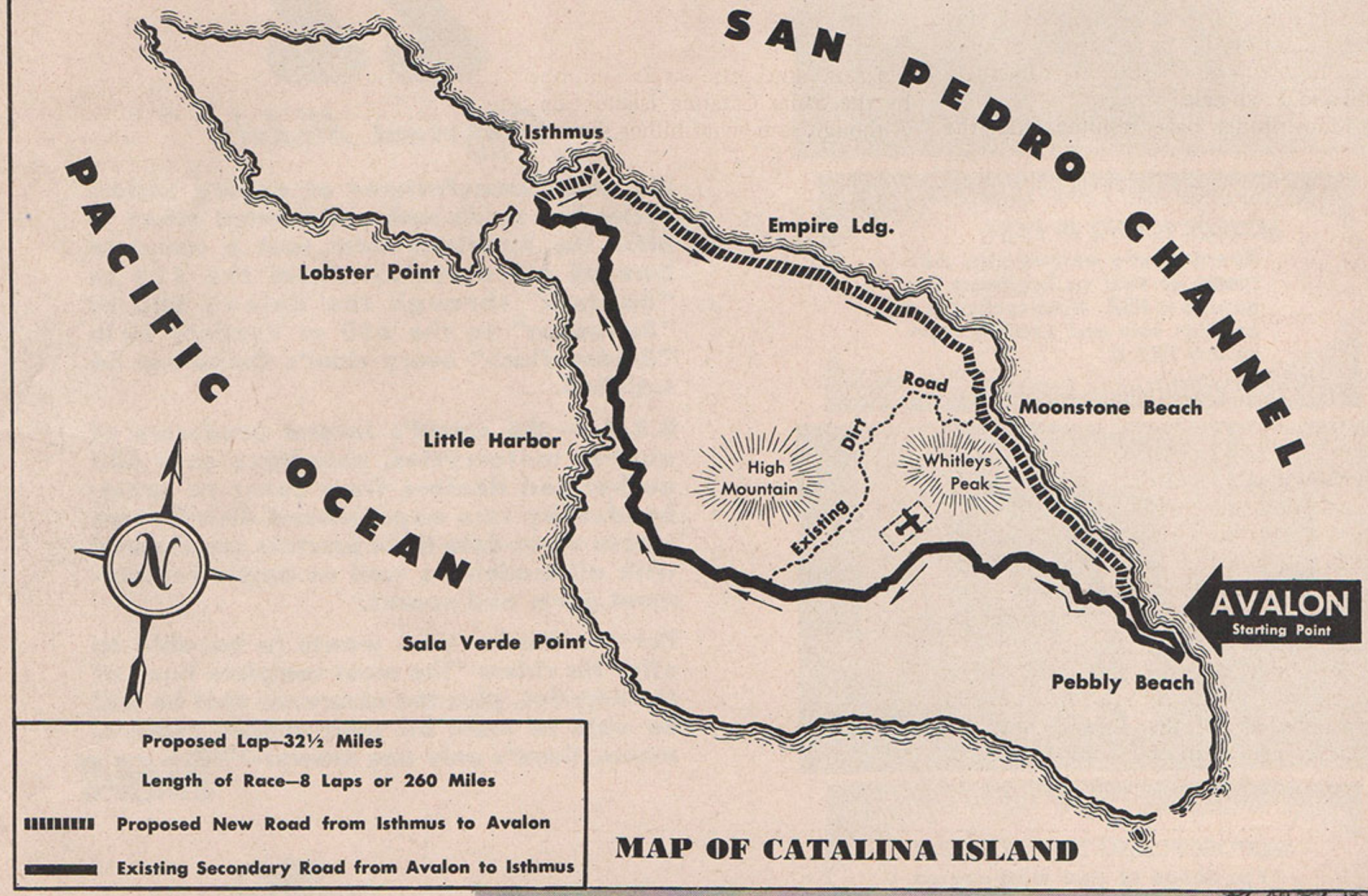
Catalina

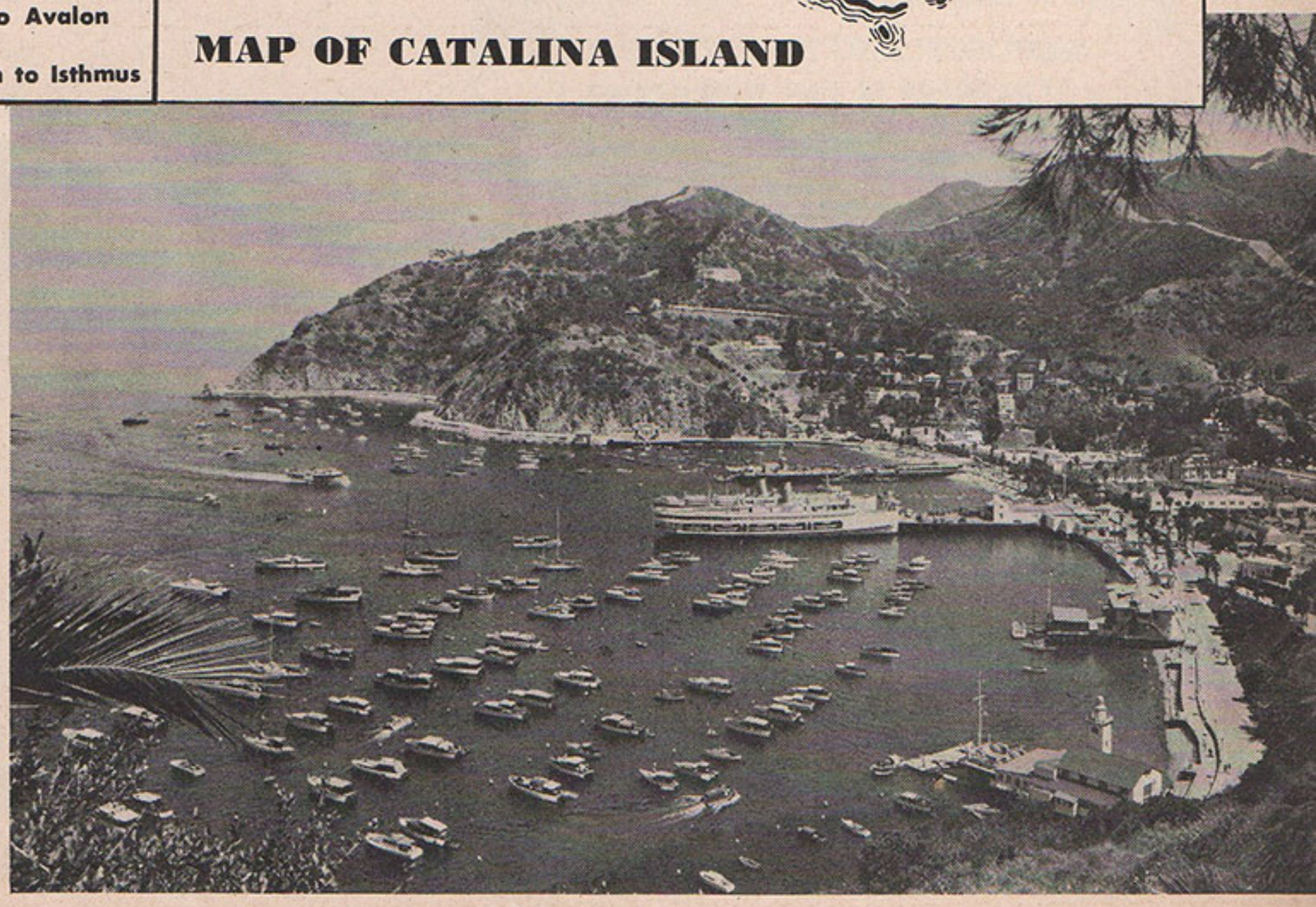
ANOTHER ISLE of MAN

U.S. ATTRACTION FOR INTERNATIONAL ROAD RACE

Maps by Felix Zelenka



MAP OF CATALINA ISLAND



EACH year since 1907, with the exception of the years comprising both World Wars, the greatest annual motorcycle race in the world has been held on the Isle of Man, off the west coast of England. The month of June this year will provide another spectacle for the throngs of fans who visit this stupendous speedfest every year. CYCLE magazine will have W. H. Onslow, its foreign correspondent, on hand to report the races in his own way, complete with the finest pictorial coverage that can be secured.

The record speed set up in the first Isle of Man T. T. race in 1907, by C. R. Collier riding a Matchless, was 38.22 mph. The record speed established last year (1949), by three-time winner Harold Daniell, on a double overhead cam Norton single, was 86.93 mph. The all-

time fastest race average was pegged by George Meier in 1939, riding a supercharged German B.M.W. at 89.38 mph. The mid-century year of 1950 may see this phenomenal record broken.

The Isle of Man is situated in the Irish Sea, approximately 70 miles from the English coast. It's a rather small island, 33 miles long by roughly 8 miles wide (220 square miles), composed of hilly country with majestic Snaefell Mountain forming the highest point of elevation (2034 ft.). The race course measures 37¾ miles, being an all-paved road containing over a thousand curves and corners per lap and varying in elevation from about 50 ft. above sea level to something over 1400 ft. The course is thus not only very twisty and serpentine in layout but is also very much "up hill and down dale."

Many things have resulted from the annual running of the Isle of Man races. Among them; the world's finest road racing motorcycles, racing riders unequaled anywhere in the world for skill and perfection in riding technique, a superb "show" once a year for hundreds of thousands of fans, friendly international rivalry that successfully bridges the dark chasms of politics and wars.

The inhabitants of the Isle early recognized the commercial possibilities of providing an irresistible yearly attraction with which to draw vast numbers of vacationists, tourists, and race fans to the tiny island. Visitors need to be fed, sheltered, and provided with souvenirs. The annual T. T. motorcycle races became the magnet, even the passenger steamship lines enjoying increased revenue. Aside from the famed tail-less Manx cats, which are known the world over, the Isle of Man has become the greatest center in the world for spectacular motorcycle racing. The annual Isle of Man T. T. races enjoy the same position of popularity with Britishers and Europeans as does our own World's series in baseball or the annual Rose Bowl football games.

Hasn't it been a pity that no enterprising group of business people in this country have never awakened to the "natural" duplicate set-up long existing in our own country to yearly emulate the famous Isle of Man?

The "natural" set-up to which we refer is that world-famed pleasure Island, thirty miles from Los Angeles, California, Santa Catalina Island! Santa Catalina Island is similar in size to the Isle of Man.

Once owned by William Wrigley of Wrigley's chewing gum fame, it is today a private enterprise owned and operated by the Santa Catalina Island Company. Although somewhat hillier than the Isle of Man and being practically devoid of paved roads, Catalina (for short) offers every potential to provide the same type of regular "customer attraction" which has been for so long a monopoly held by the Isle of Man.

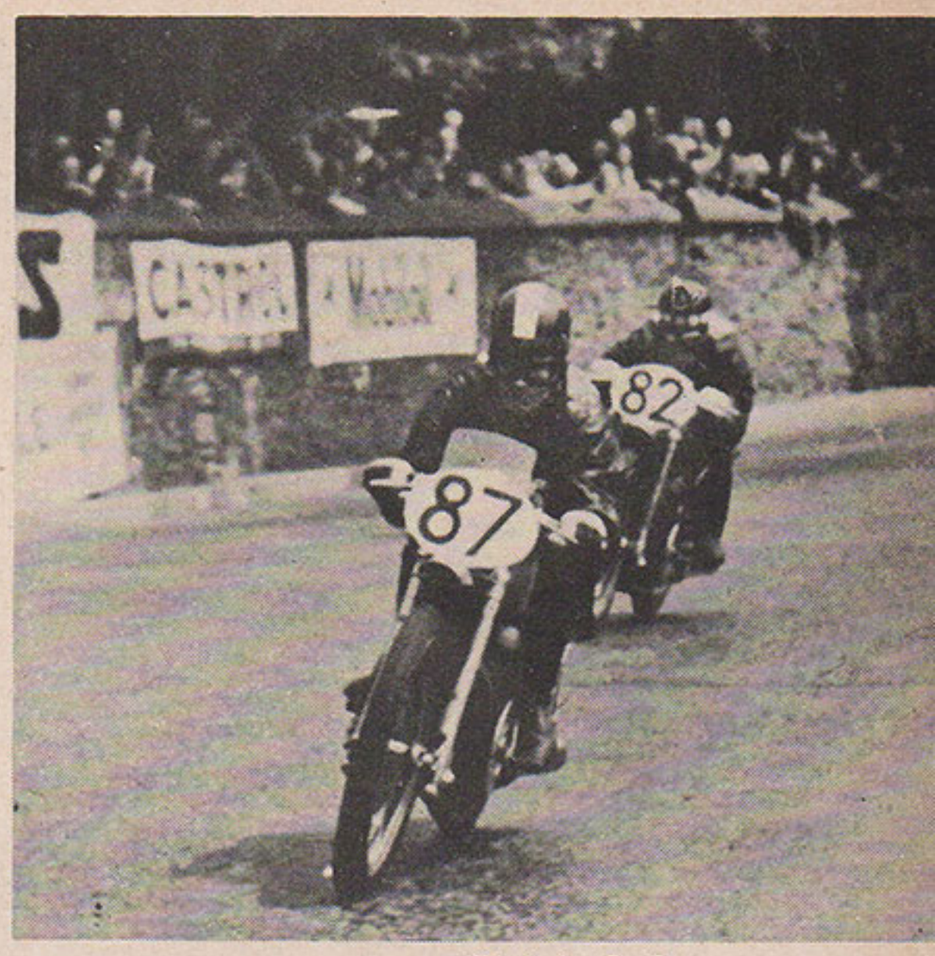
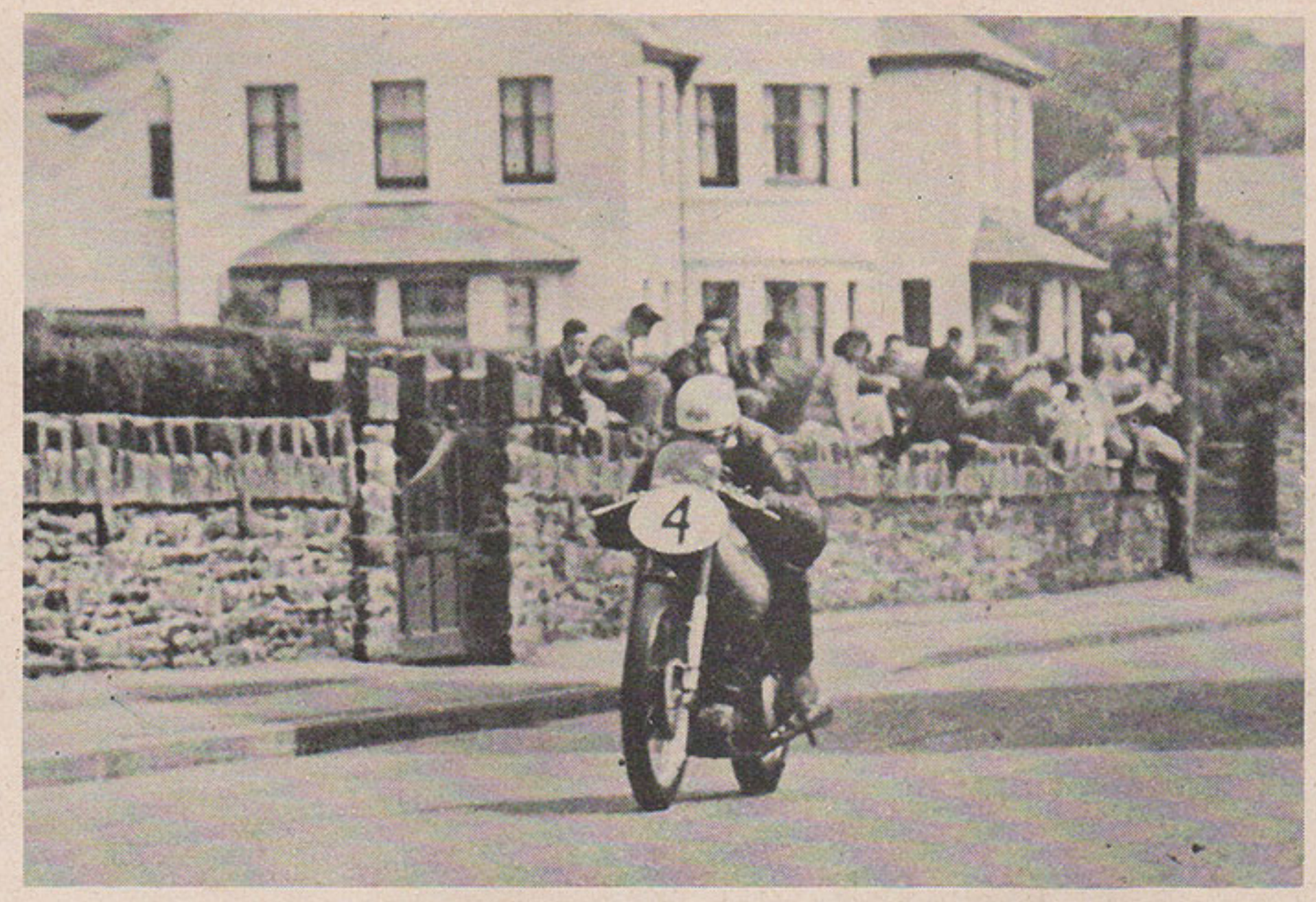


Photo by Onslow



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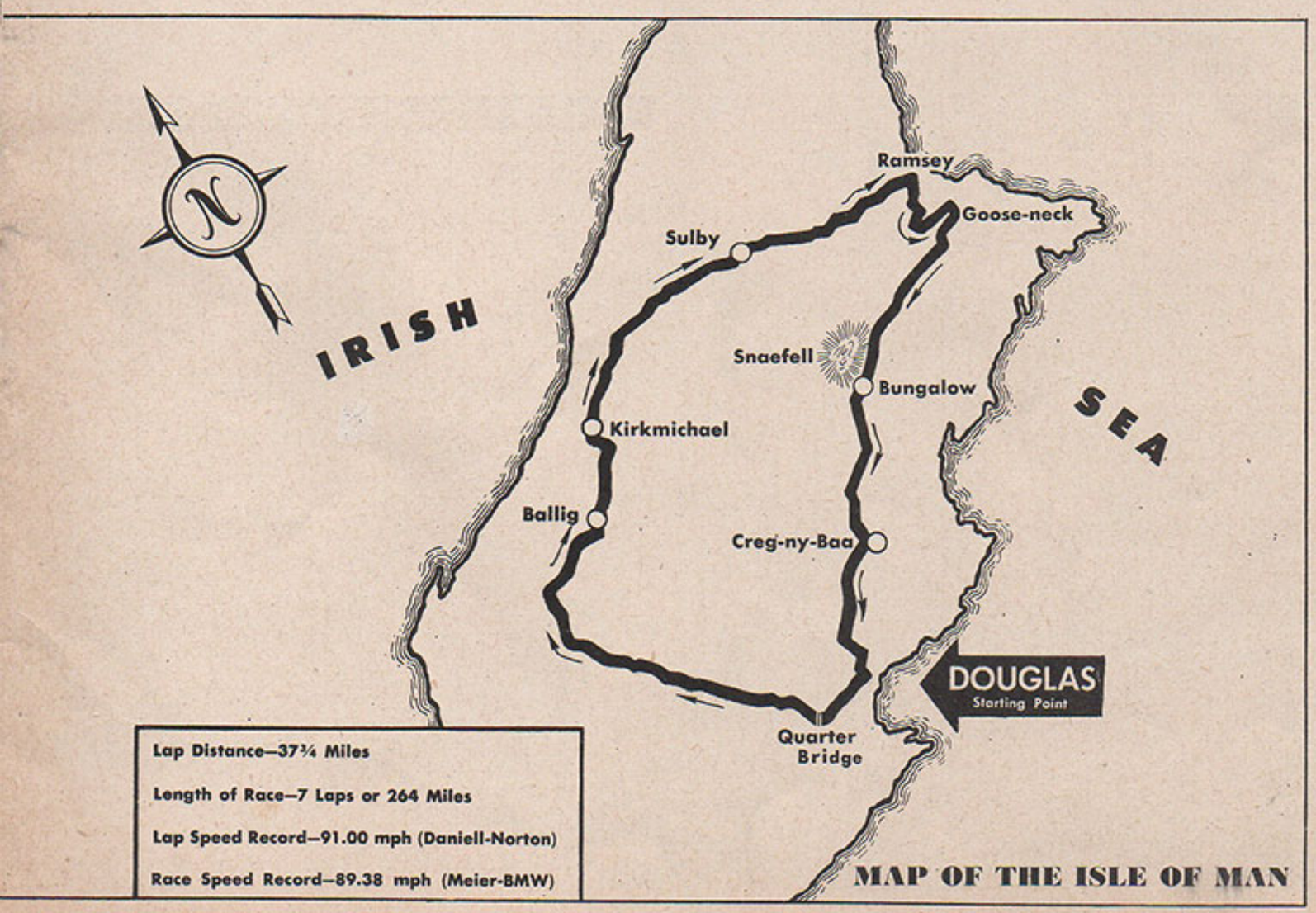


MAP OF THE ISLE OF MAN

Study of the two maps herewith will quickly show the great similarity in geographical aspects between the two islands. Douglas, the largest Manx town, has a counterpart in Avalon; Ramsey and Isthmus have much in common. Snaefell Mountain and High Mountain seem to be twins. Even Quarter Bridge and Pebbly Beach could be close cousins.

To perpetuate an honored name in sports, as well as business, we respectfully offer our suggestion for a fitting name to apply to such an interesting and worthy undertaking . . .

The Wrigley Race Course
Catalina Island
California
U.S.A.

"BUS" SCHALLER Experiments with Fuel Injection

RECORD CONTENDER USES FUEL INJECTION —NO CARBURETORS

Photos by Pete

EVEN during his two war jobs, regular and swing shift, Harold Schaller kept a speed spark alive in his thoughts. His all-consuming ambition was to some day become the mind behind the World's motorcycle speed record.

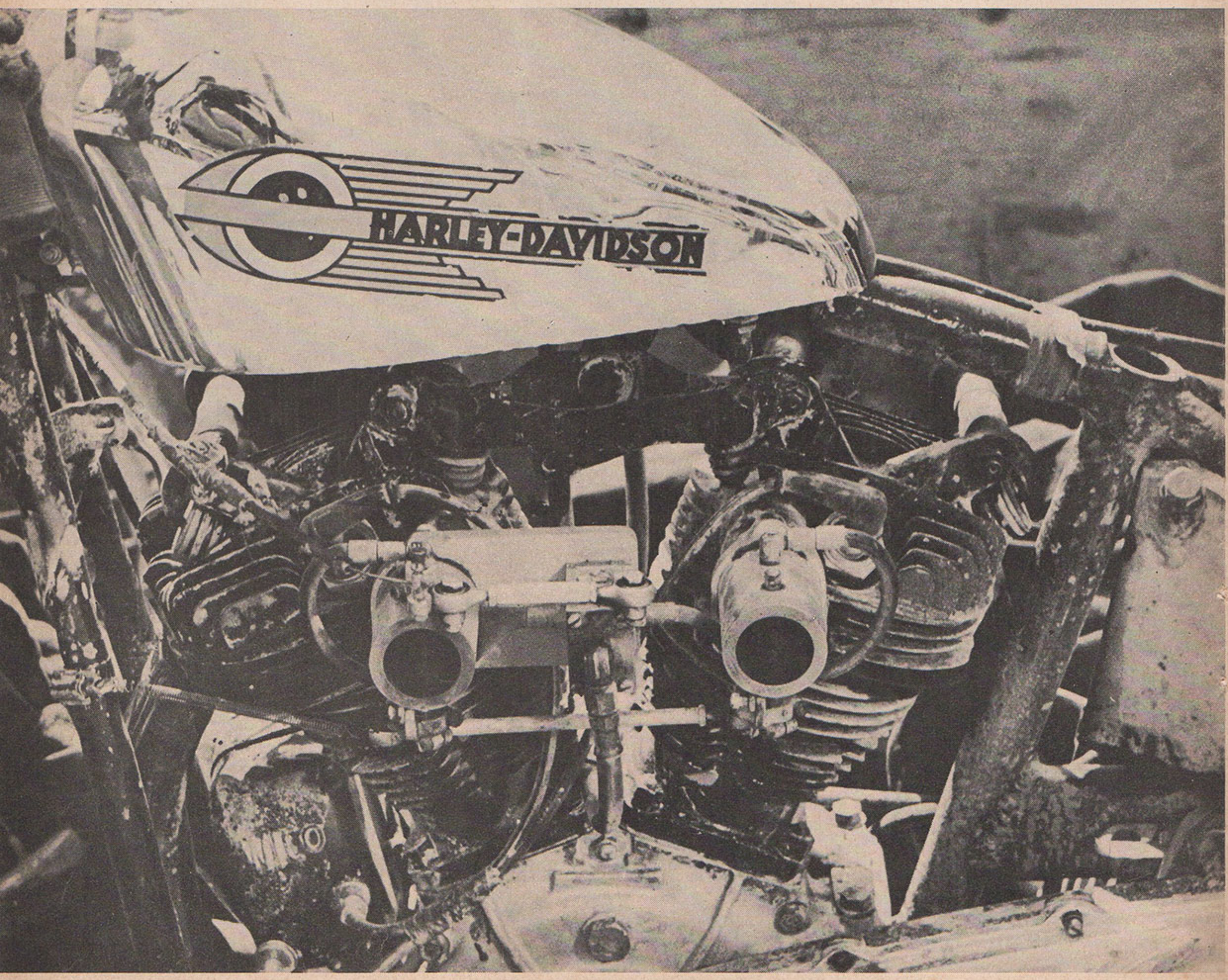
How he became nicknamed "Bus" he doesn't remember, but he can readily recall his early interest in motorcycle speed records. "Bus' is a real polyglot; printer by trade, machinist by training, engine revamper by desire, intensely determined by nature, husband and father by choice. He has established a cam regrinding and special carburetor building business which he operates at night and week-ends when his printing presses (he owns his own print shop, rather extensive layout, too) have been quieted.

Last summer he wangled 141 mph out of his Harley 61 at Rosamond Dry Lake. In September he visited Utah to have a workout on Bonneville. One thing and another kept harrassing the 61, so "Bus" returned home for further experimentation.

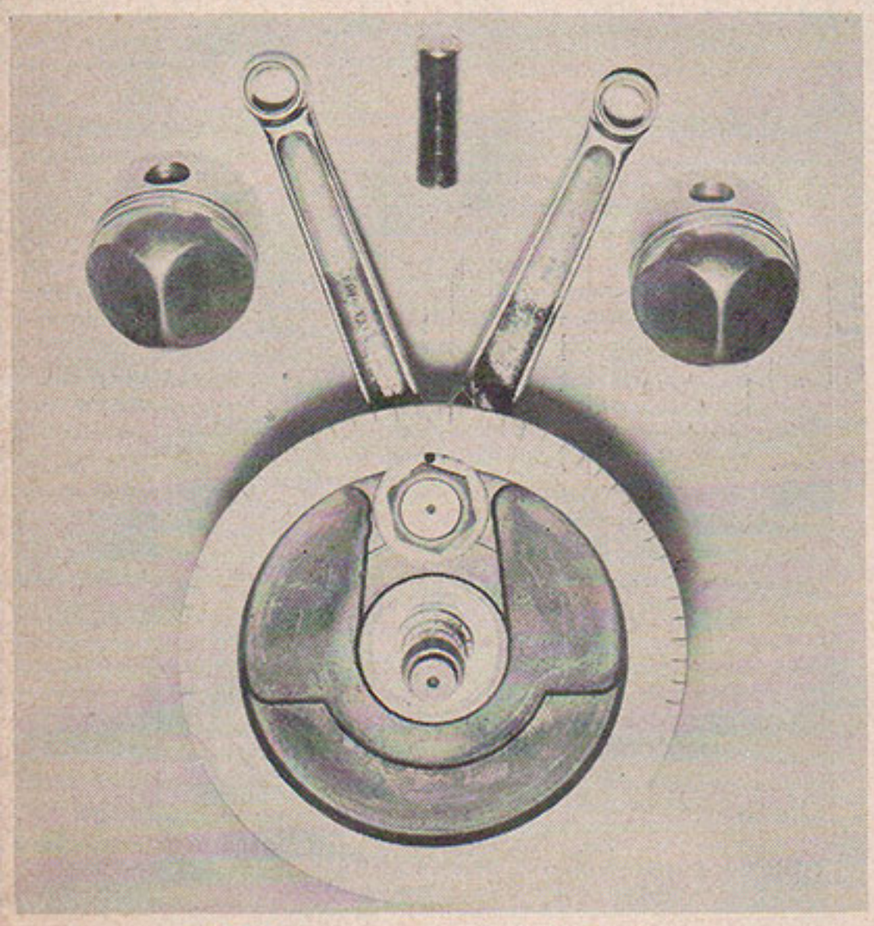
This summer "Bus" will try again. With the help of Stuart Hillborn, well-known designer and builder of fuel injection systems, the Schaller Five Dozen and One will attempt a shot in the region of 160 mph. He will ride it himself because, he says, "I know the rig from rim to rim, so why not?" His weight (around 145 lbs.) will be an added advantage.

The American Speed Record is now pegged at 150.313 mph (Rollie Free—Vincent HRD). "Bus" hopes to bust it at Bonneville. If determination is the key, he'll do it. Either way, CYCLE will have the story.

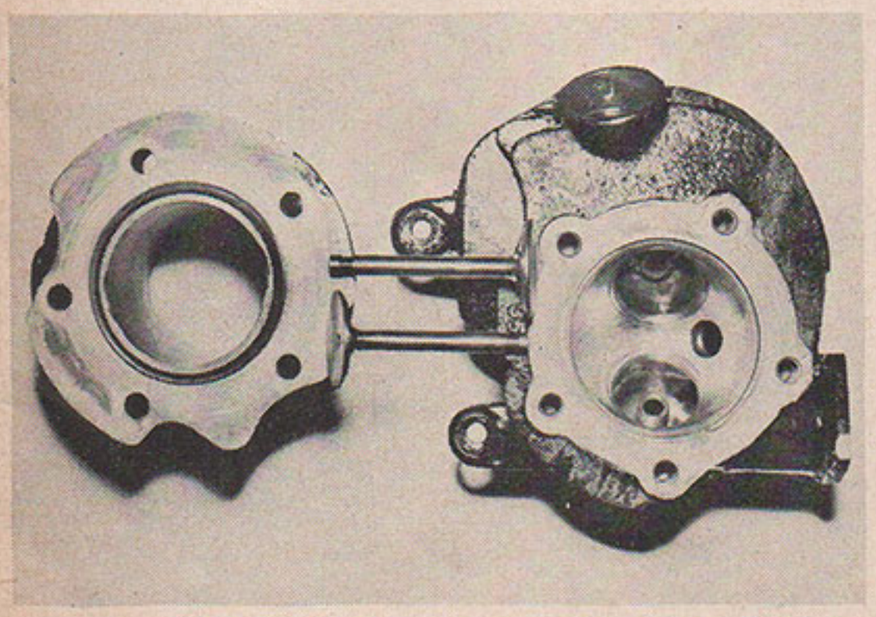
BELOW—Still covered with "Lakes" dirt, the fuel-injection Schaller Special displays its works. Huge air intake stubs, open valve rocker gear, and Wico magneto are interesting features



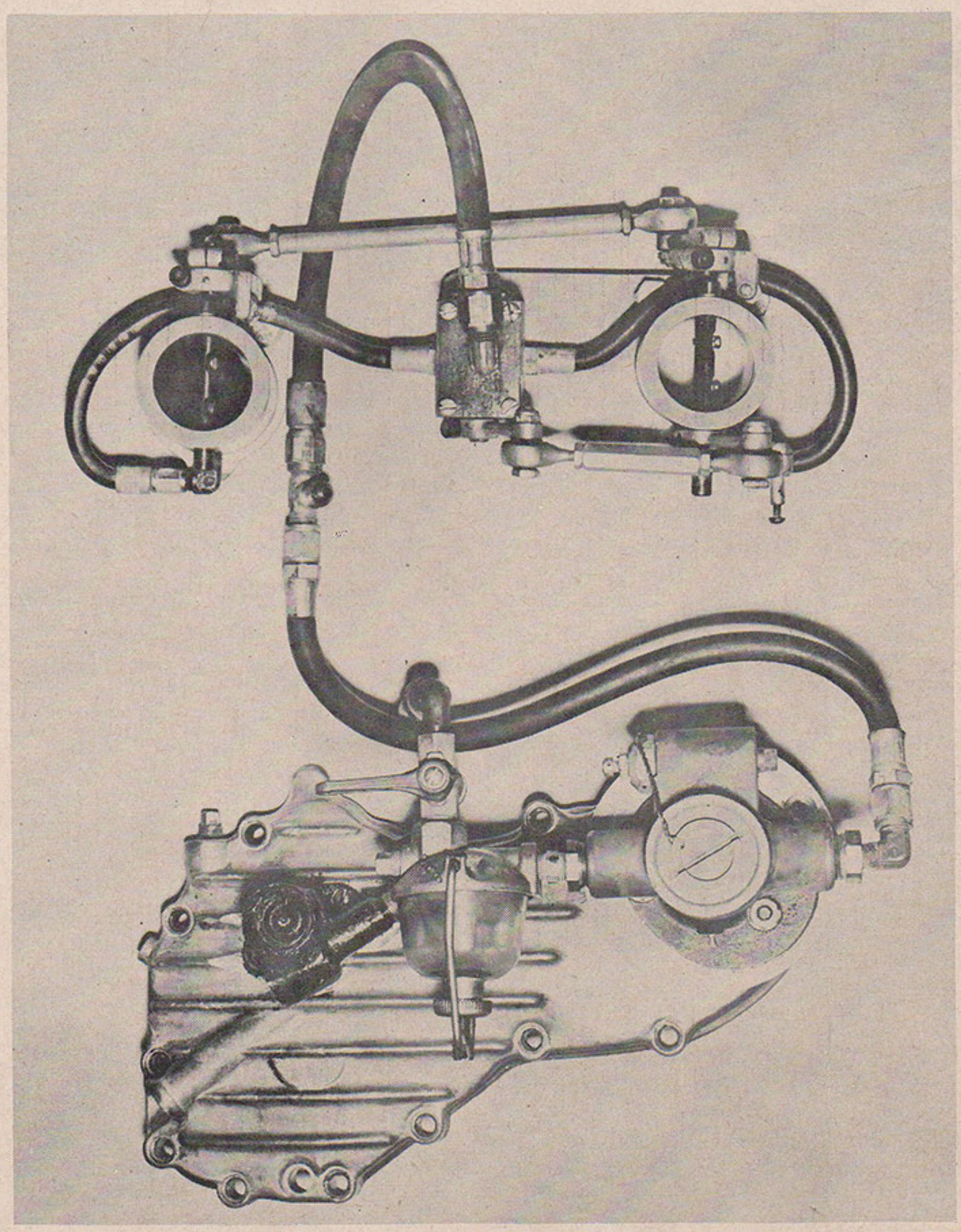
ABOVE—Components of Schaller engine laid out for inspection. All internal parts are highly polished to minimize friction. Flywheel assembly has not been materially reduced in weight



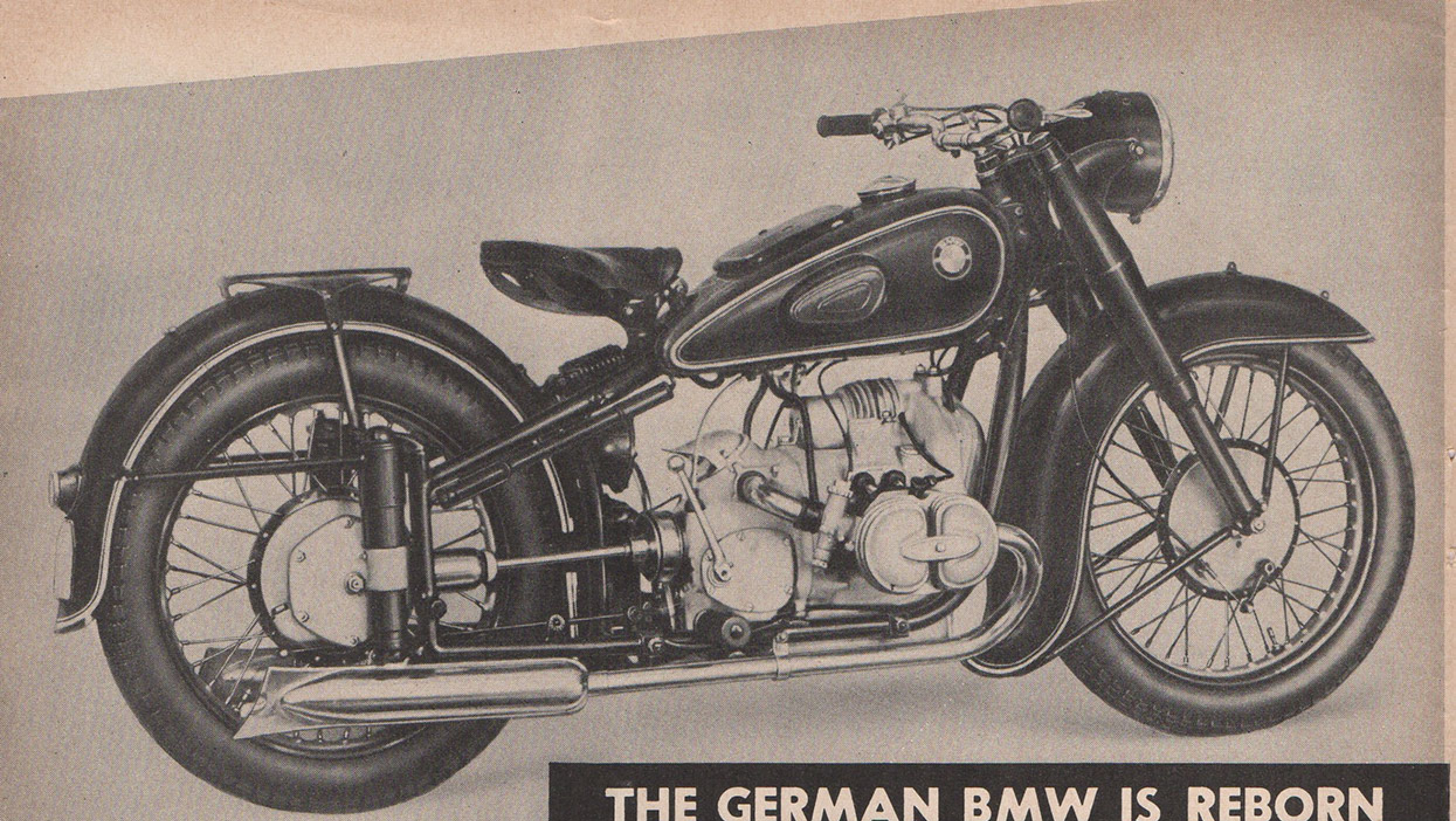
ABOVE—Very carefully balanced lower end assembly. Specially made pistons for alcohol fuel feature pointed domes. Note timing degree marks on flywheel, assures correct timing



ABOVE—Cylinder, head, and valves. Side intake port to cylinder head assures good gas flow. Both valve ports are highly polished



ABOVE—Essential parts of the Hillborn fuel injection system. Air pump is driven from front of cam case delivering mixture through flexible tubing to air intake stubs. Examples of careful workmanship are evident throughout every part of Schaller powerplant. To be tested this summer



THE GERMAN BMW IS REBORN

Holder of World's Speed Record Returns to Production

by Griffith Borgeson

THE BOYS that have learned to love bikes since '41 will not have heard much about one of *the* two-wheeled masterpieces of all time—the BMW. In fact, even before the war, few of these classic and unique shaft-driven, foot-shift, opposed twin jobs reached our shores. But racing news got here, and when world's speed records were discussed you always heard mentioned at the head of the list the initials of the Bavarian Motor Works. If you lived in a big city, once in a while your attention was caught by the sound of a powerful yet well-bred exhaust and you wheeled in time to catch a glimpse of one of the cleanest machines ever built, before it slipped out of sight. Well, we can count on seeing a lot more of this make in the future, just as we're seeing more English jobs every month . . . BMW now has an American national representative and agencies are springing to life.

Two models are offered—a 250 cc and a 500 cc, described in some detail below. The most advanced of the two —and the most typically BMW—is the 500 cc flat twin. The most remarkable thing about this very interesting machine which does such a thorough job of combining the best features of utility, heavy-duty, and sport bikes is that there is really nothing new about it. There have been a few minor post-war refinements but even these were carried out by the same engineers who guessed right the first time when they produced the original shaft-driven BMW over twenty-five years ago.

If there was ever a question about the workability of a drive shaft on a motorcycle it was forgotten in 1923. That's the year in which the Bavarian Motor Works bluntly placed its first motorcycle on exhibit at the Paris Motor Salon. We say bluntly because BMW simply hauled off, with no fanfare, and entered the mass-production motorcycle business with a product that for its time was thoroughly unique and, in fact, still is. Their first machine had all the distinctive marks that are to be found on today's models: universal-jointed drive shaft, gear box a unit with engine block, foot shift, hand clutch, two-cylinder, 500-cc opposed engine. All the improvements which have followed—and they've been mighty successful ones—were made on this brilliantly engineered prototype.

The first machines made friends everywhere. They were not yet remarkably fast —the engine output was about half of what it is today—but first the trimness with which they were designed and put together attracted admirers. Then the ruggedness, dependability, and the ability of these little jewels to perform as pleasingly on Alpine stone trails as on the open roads of Europe quickly earned them a precious reputation. In '25 the first ohv model came out, pulling 16 bhp and in the same year a less sporty 250 cc lunger reached the streets. Then, in '28, the other great BMW twin, the 750 cc, appeared and the following year BMW scooped the world with the pressed steel frame.

It was at this time that some of the boys began trying to find out just how fast a BMW would go. Germany had never made any real dent in international motorcycle competition, England having pretty well cornered the market, mostly by way of JAP (J. A. Prestwich) engines. The turn of the tide came when Ernst Henne of Munich found a stretch of road in Austria long enough and straight enough to wind his blown 750 cc BMW up to 134 mph. This was in 1929, was an absolute world's record for two-wheeled vehicles. The folks around Munich were justly happy and proud and BMW adopted a new slogan, "The Fastest Motorcycle in the World." Remarkably enough, they've never had to change it. They haven't even had to find

a new pilot. If, as occasionally happens, some other make succeeds in going beyond the existing BMW-established record, the same Mr. Henne drops around to the factory for a bit of tuning, then blandly sets a new record. It's been going on for twenty years!

There have been challengers at all times, of course. In 1930, J. S. Wright of England upped the record to 137 mph on an OEC-JAP. Henne went right out and added one mph to the figure. This spurred Wright to change machines and make another try later that year. On a Zenith-JAP he startled the world by just passing the 150 mph mark. This was an enormous increase over the previous record and it wasn't until '32 that the Henne-BMW team managed to top it by a little over one mph, again. In '34 Henne was still only able to slog along at 153 per on his 750.

The opening of the Frankfort to Darmstadt Autobahn in '35 brought about a major change in European motor sport in general. It furnished a backyard proving ground for ultra-fast vehicles and it was of course the home team, the Germans, who had most opportunity to make use of it. In this year Henne was able to boost his record—the World's Record—to 160 mph. Competition—within Germany and without—tore its hair, blew itself up, generally outdid itself but with discouraging results. The BMW record stood pat.

Just to keep things sporting, the factory decided to drop the 750 cc class and develop the 500 cc power plant as a racer. The use of a streamlined shell to cut down wind resistance brought howls from the purists—still, if the last word in speed was to be uttered, drag had to go and the Streamlined Record Machine was soon accepted as The Thing. The 500 cc showed itself to be more than equal to the good old 750 and in the Fall of '37 the last word *was* uttered: Henne breezed down the Frankfort Autobahn at 174 mph! Thirteen years later the record still stands and BMW rests upon its more-than-earned claim of being "The Fastest Motorcycle in the World."

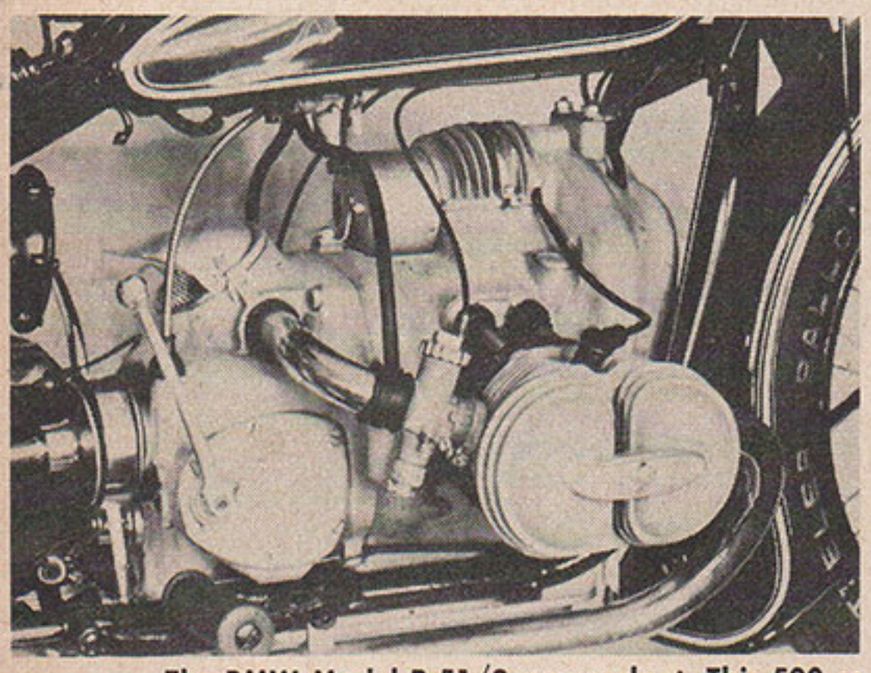
Of course speed and performance of this calibre have little real meaning for the cyclist on the street or on the cow trail. This type of bike rider who wants to know what BMW can do has only to look at the road racing record that the make has piled up. There's no point in making this article just a list of competition results. It's enough to say that in every sort of *practical* event—grueling, many-day cross country wear and tear tests, road races of all sorts, BMW has repeatedly and often come out on top. The best example is the Isle of Man Tourist Trophy, probably the most rugged test for motorcycles ever rigged, won against the world's best machines by a BMW in time that also stands as a record today.

Five years after the war's end BMW is coming back as one of the great names in motorcycling. What's been happening in the meantime? When Germany surrendered, BMW's holdings suffered the usual fate, were placed in custody, and production stopped. In '46, permission was granted for the factory to produce motorcycle replacement parts, farming tools, and household articles. Toward the end of that year they were allowed to resume motorcycle manufacture. Reparations dismantling began in January of '47 and we're told that 4000 pieces of BMW equipment, from the latest machine tools down to the kettles from the company cafeteria, were distributed among sixteen nations. These fortunes of war added up to a pretty severe body blow to the factory, but a small number of new machines was hustled together and, in '48, a new, refined version of the 250 cc lunger began rolling off the assembly lines. Today the plant has 2500 employes who must feel pretty secure in their jobs; it will take years of production to catch up with the existing demand.

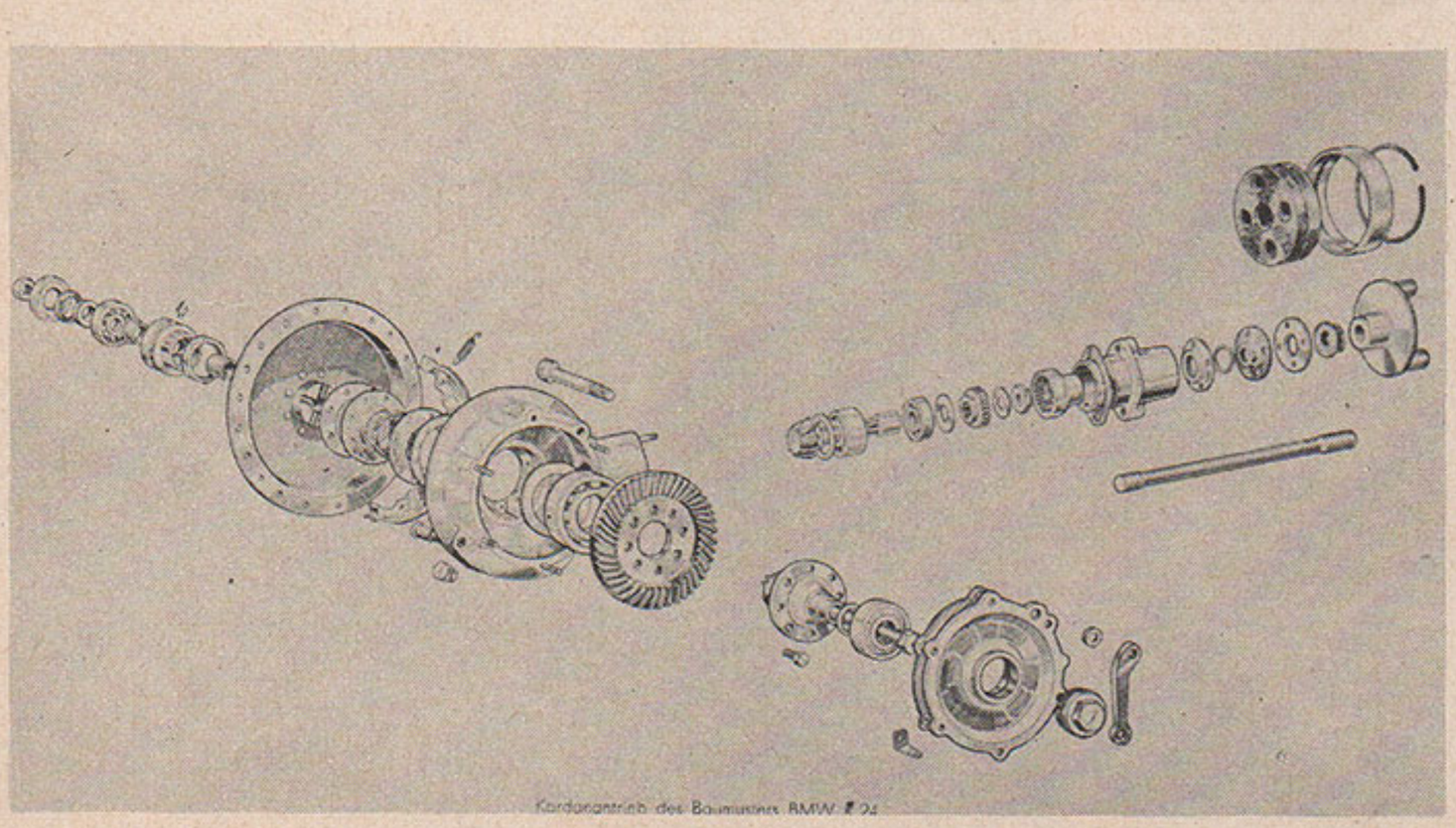
What might be called the Rolls-Royce among motorbikes—the BMW 500 cc flat twin—offers the admirer of high efficiency machinery an unusually interesting package. Starting forward and working aft, these are some of the points worth noting: Front wheel is interchangeable with rear, both use the same knock-out axles. The stock front fender has an unusually deep section—the better to deflect mud. The forks are coil spring telescopic, tension being adjustable and, for security, the fork rather than the ignition switch is provided with a lock. The frame cradles the motor in closed, double loop tubes and the topside of the engine is anchored to a frame bracket.

The entire engine housing, including the integral gearbox, is cast in light alloy. Pushrod operated oh valves are inclined in hemispherical combustion chambers and the entire valve gear, like every other part of the engine, is positively sealed against dirt, moisture, and dust. Each cylinder has its own carb which sends the fuel charge to the cylinder on a slight skew. Fuel supply to the carbs is from a common fuel filter and both pots draw through the same air cleaner, which is neatly recessed in

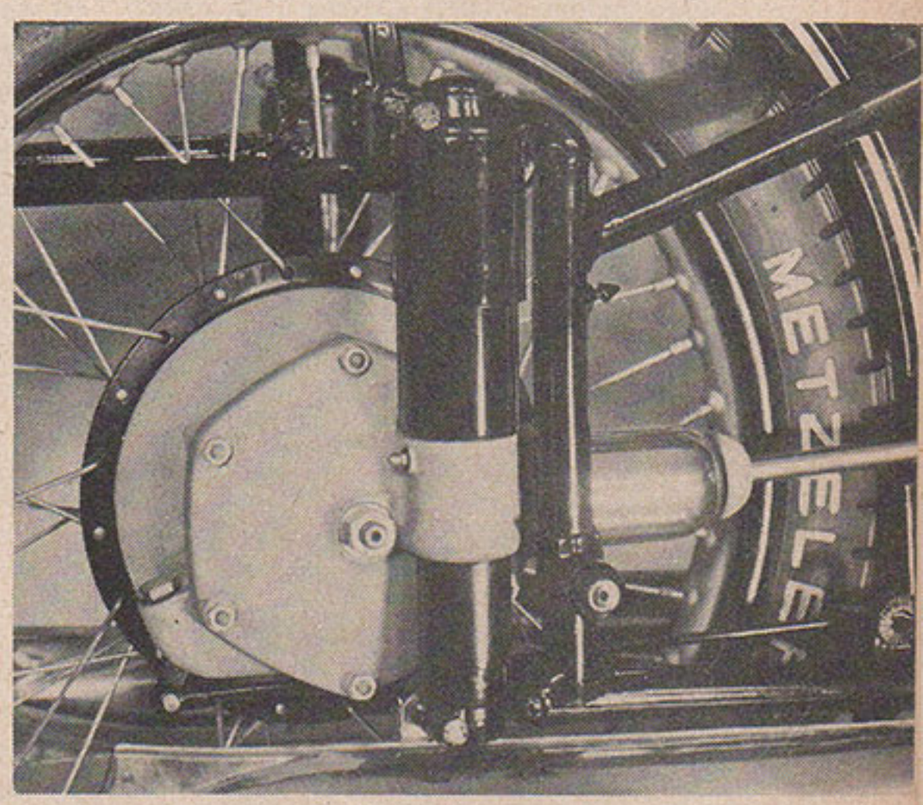
(*Continued on Page 29*)



The BMW Model R-51/2 powerplant. This 500 cc flat twin develops 24 bhp, features oh valves



Exploded view of the time-honored BMW shaft-drive layout. First built in 1923 this drive assembly has proved a world-beater. Has required no basic alterations since its inception 27 years ago



Spring-frame suspension, shaft-drive unit, and rear brake assembly is neat and businesslike

MOTORCYCLES "DOWN UNDER"

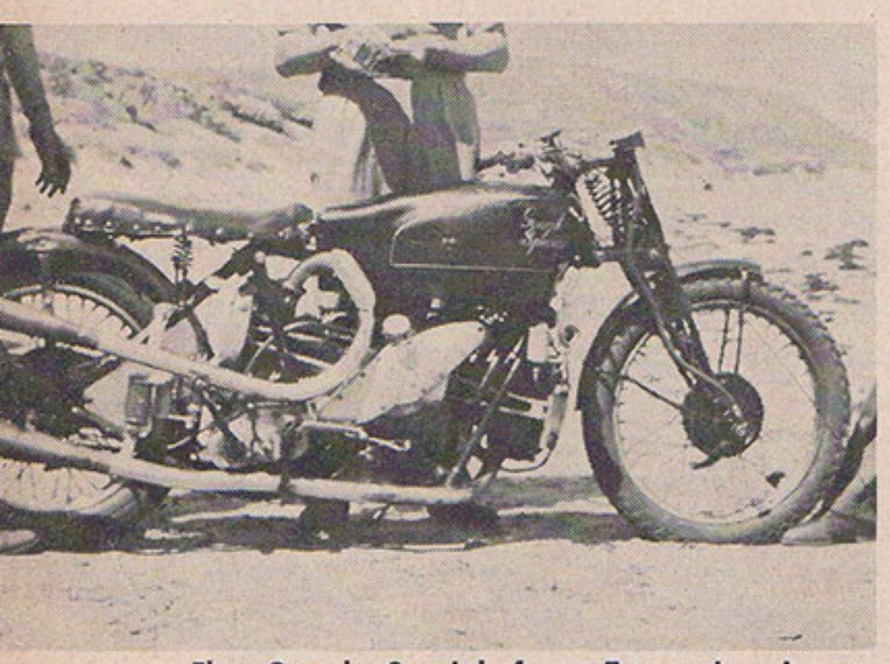
ANZAC ENTHUSIASM

Photos from CLAREX, Ltd.

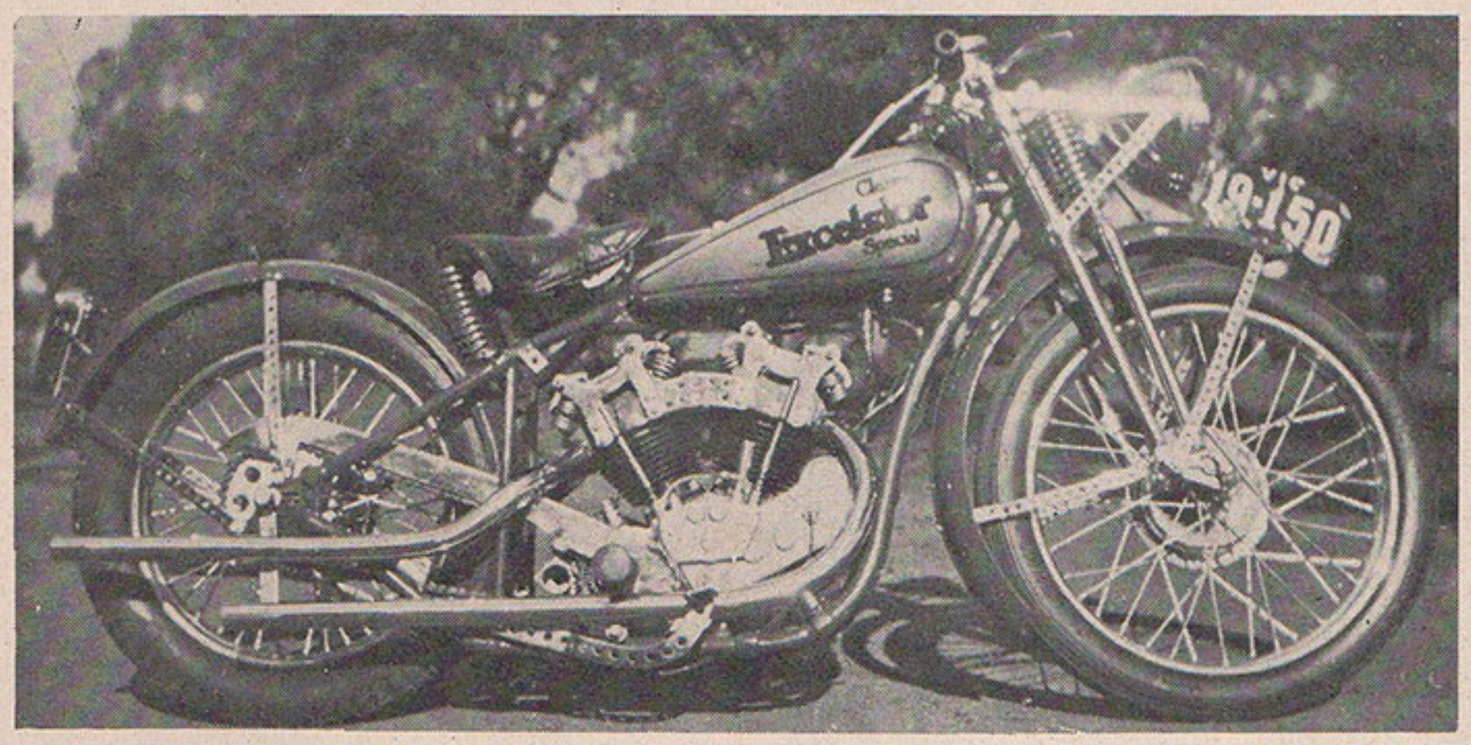
STRICTLY speaking, the word Anzac is an army term dating from the 1914-1918 war, meaning Australian New Zealand Army Corps. The initials of each word spell ANZAC. The term, however, has grown in acceptance to stand for people and things hailing from "Down Under." In the latter sense, it applies to motorcycles.

The lands "Down Under" have produced one everlasting contribution to the world of motorcycling—Short-Track Racing. This style of racing was originated in the early '20's and some of the greatest exponents of Short-Track racing have called Australia or New Zealand "home."

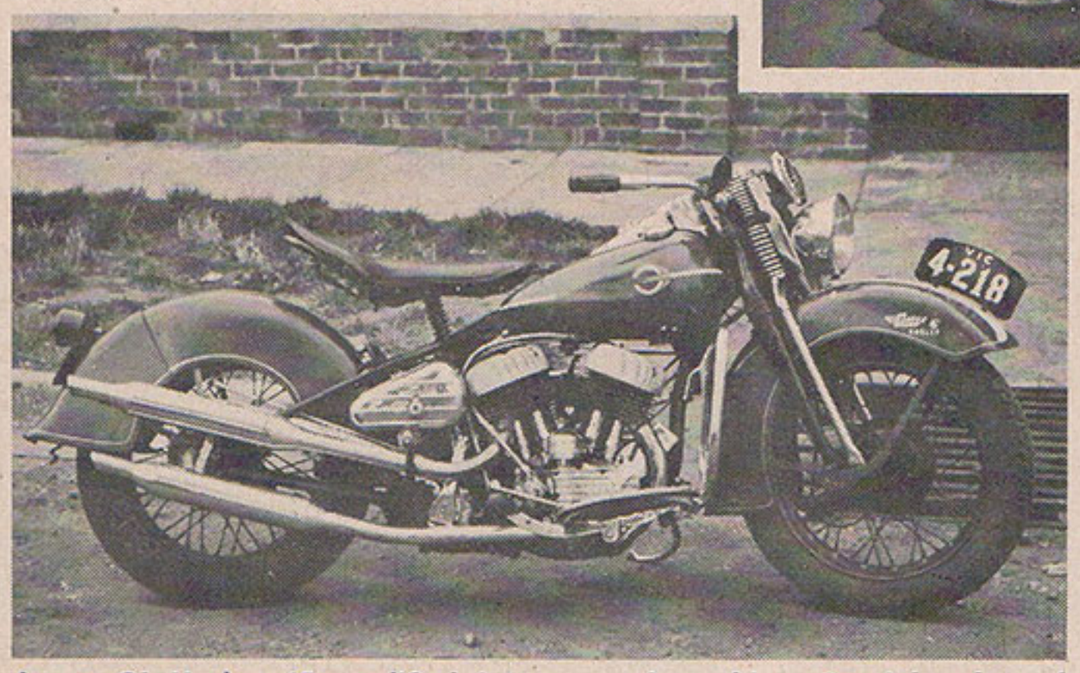
Motorcycles are a fever and fetish in kangaroo-land. Some of the photos herewith visualize to what interesting ends the enthusiastic Anzacs have carried the sport. Next time the urge strikes you to "individualize" your bike, don't follow the time-worn pathways of "more chrome" or "less garbage"—build a whole new engine (patterns, castings, etc.) or reef and bash a bit until the parts selected for lightening up are reminiscent of Swiss cheese or Mother's kitchen sieve!



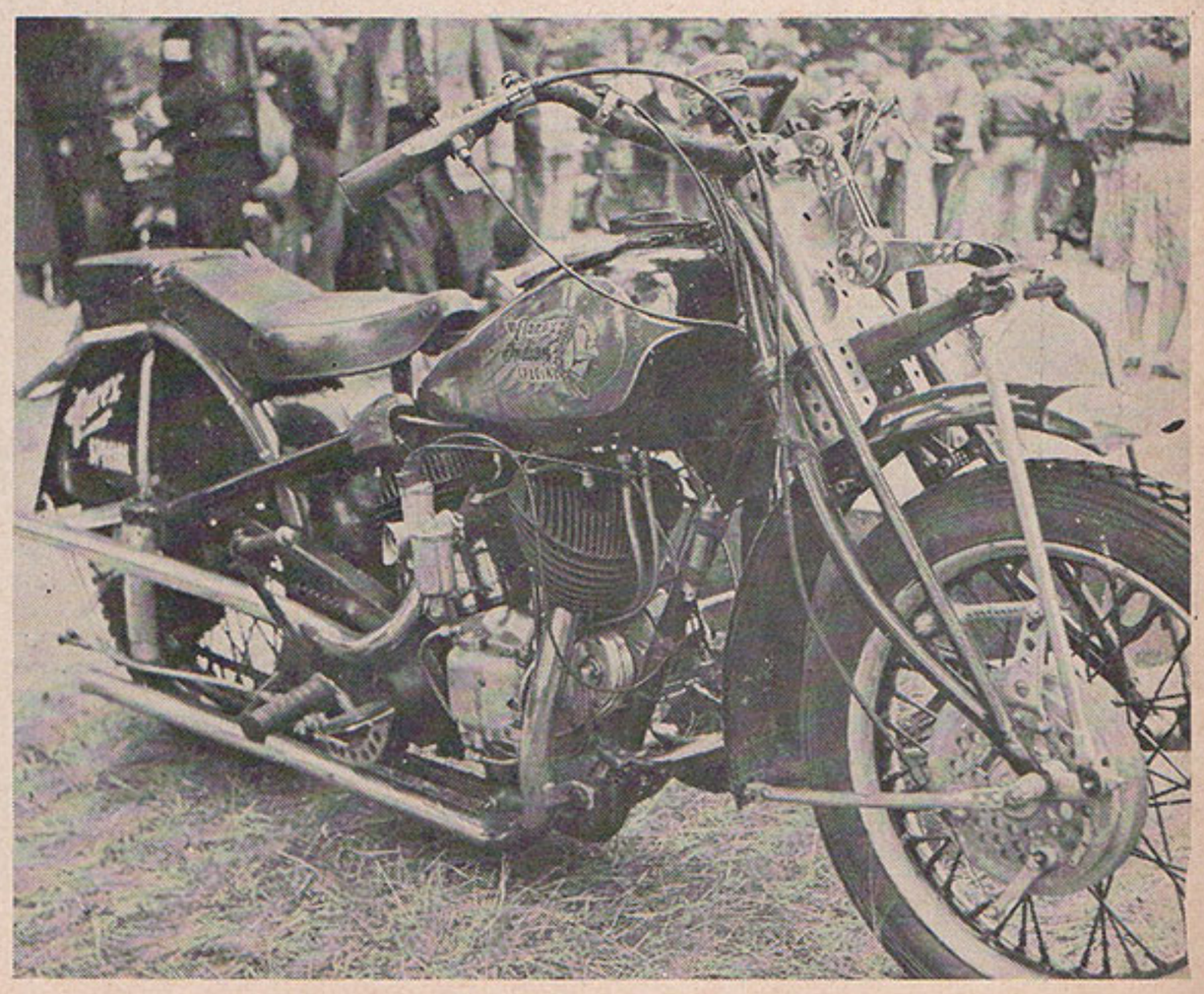
The Gough Special from Tasmania. A very potent 1000 cc opposed twin. Engine designed and built entirely by the owner. Uses two BSA cylinders and overhead valve heads, twin Amal carburetors, BSA gear box. Clocked on Baker Beach, New Zealand, at 123 mph the first time it ever ran. A very commendable first attempt



Special Excelsior-engined Super X road machine. Overhead 45" engine features hairpin valve springs and dual exhaust pipes. Brakes are from a 1931 Royal-Enfield. Certain braces have been drilled for lightness, couldn't stand a "hole" lot more! Machine has turned past 100

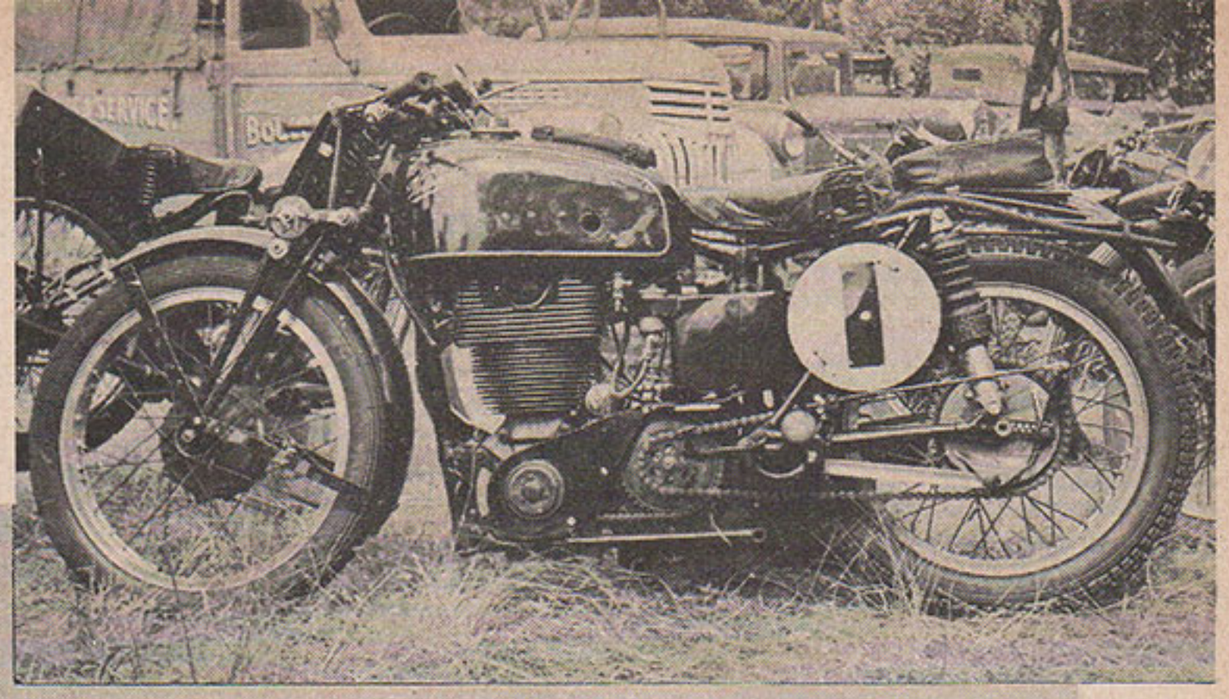


An ex-GI Harley 45 modified into a road machine. Special valanced fenders, dual exhaust system, and Clarex "flat-style" handle-bars result in a very attractive bike. Internally, the engine has received attention in the right places, provides high speed road touring for owner



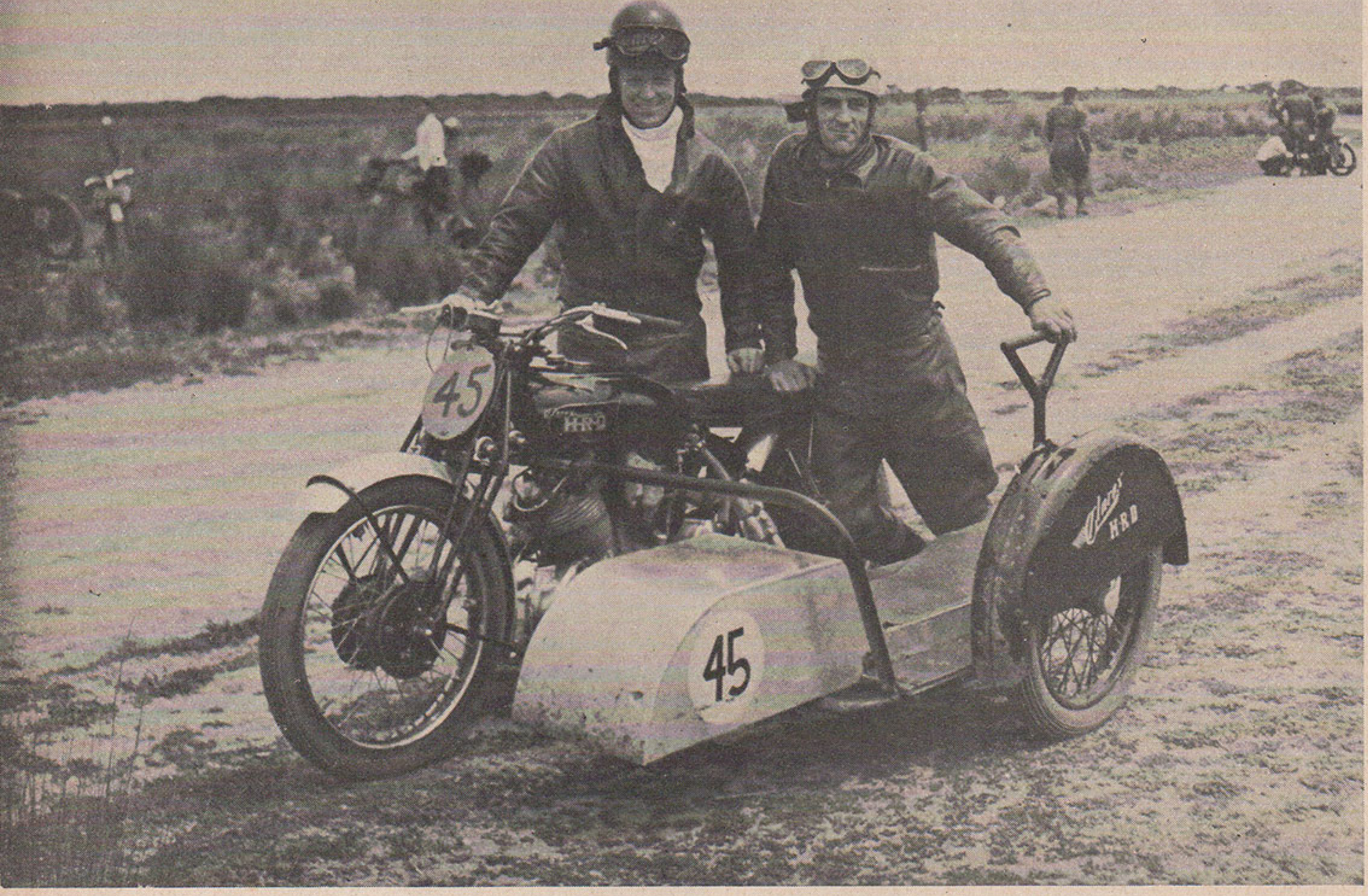
Much modified Indian Chief. Built for side-car racing on Ballarat T.T. course, machine features twin Amal carburetors, alloy brakes, Bosch magneto, hand clutch, and foot shift gearbox. Extensive drilling has reduced weight of various parts. Note special fork damper, double fender pads, oversize front brake plate. Holds numerous records

JULY 1950

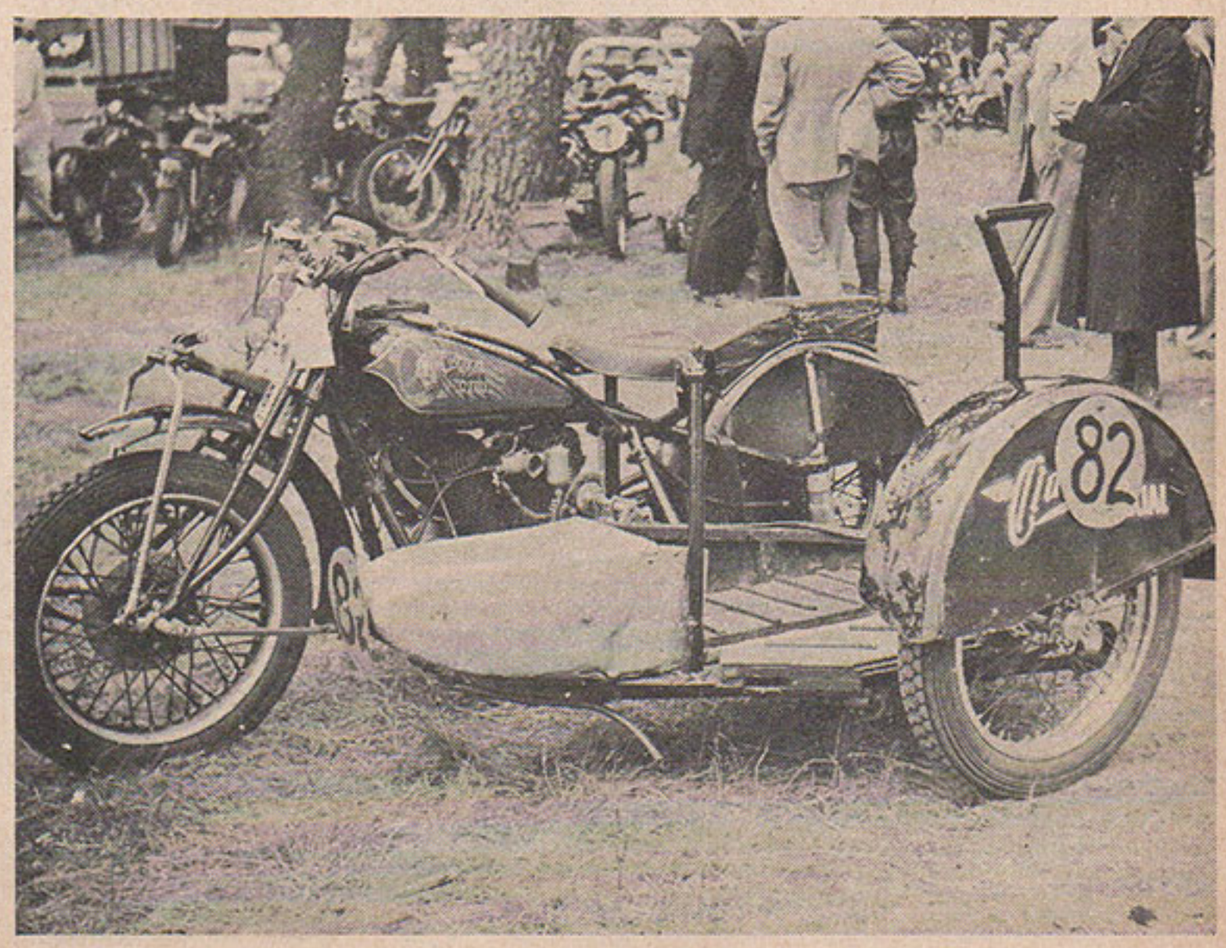


The fastest road racing machine in New Zealand, a model KTT single cylinder overhead camshaft 500 cc Velocette. Retains girder-type front forks. Has oleo-pneumatic rear springing, light alloy wheels, remote-bowl Amal carburetor. Top speed on moderate compression—125 mph. Is privately owned, tuned and ridden. Reputed to be Isle of Man job

PRODUCES SOME INTERESTING HYBRIDS

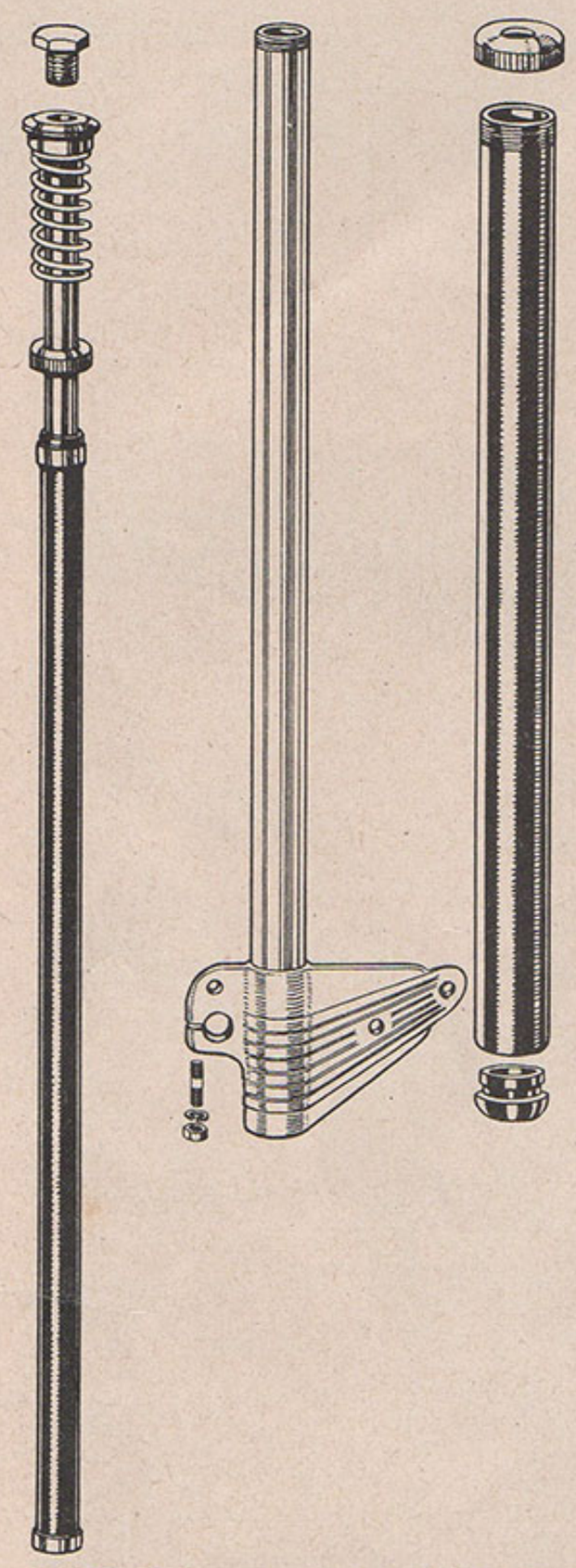


The most consistent side-car racing team in the Antipodes—F. Sinclair, rider, and N. Mead, passenger (ballast), display their Vincent HRD Series "B" Rapide complete with "overstuffed divan" sidehack. The "sewer pipe" from head lug to side-car frame appears amply rugged and Mead's triangular-shaped "grasping handle" is undoubtedly stout enough to provide mooring facilities for the "Queen Mary." Ribbed front tire and side-car tire affords maximum grip on turns to reduce sideways skidding. Parties in background are diligently searching for "lost horsepower," a common racing practice everywhere



Left side view of the modified Indian Chief. View shows elaborate racing side-car! The planked flooring, "Dutch clog" nose, and triangle-shaped handle complete the bare necessities for the hapless passenger—comfort is not essential! Carburetor intake has no air cleaner

Dunlop Develops Rubber Suspension for Motorcycles



ABOVE—Main components of Dunlop Lightweight Front Fork left leg assembly showing styling shroud. Simplicity is design keynote

THE NEW principle of rubber suspension is the result of many years' Dunlop research. Experience gained with road vehicles before the war was concentrated upon aircraft when war broke out. The Mosquito was the first aircraft to have rubber suspension as a standard fitment; it was followed by the Horsa glider and latterly by the Hornet and the Dove. Amphibious craft such as the Neptune had also all-rubber suspensions for the invasion of France.

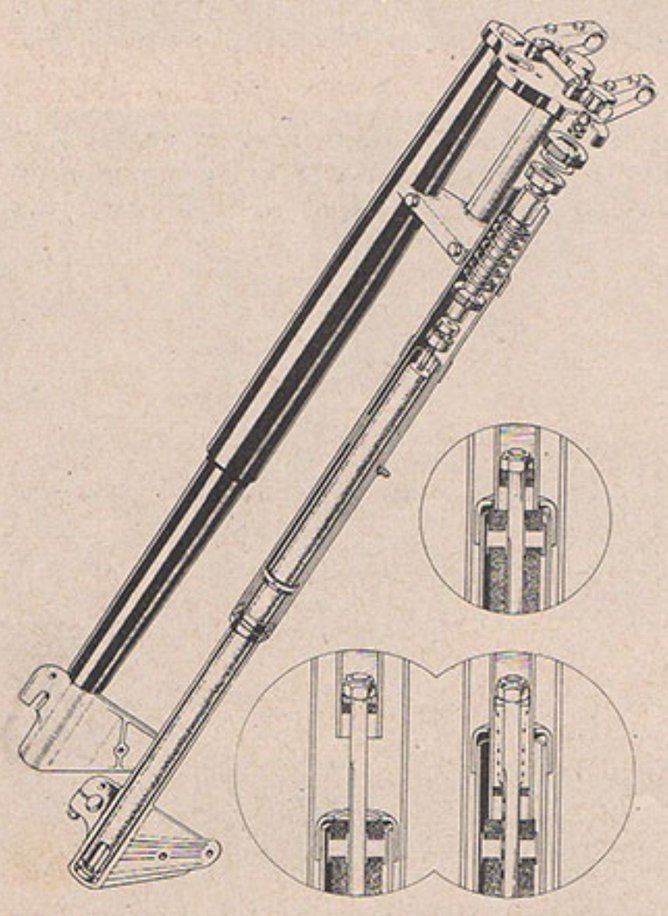
Research directed since the war towards producing rubber compounds whose characteristics, to ensure the precision essential in engineering applications, can be closely controlled in manufacture, has now extended the principle of rubber suspension to the motorcycle for which its controllability makes it eminently suitable, permitting both front and rear wheels to be cushioned from road shock. A motorcycle so equipped is not only, as road and track tests demonstrate, more comfortable but safer because the machine is more readily controlled by the rider and both braking efficiency and tractive effort are improved.

Front suspension has the ordinary appearance of the modern telescopic fork. Rubber cylinders, working under compression, absorb and dissipate road shocks, and give a smooth controlled ride. The sensitivity of the suspension is maintained by a self-energizing system.

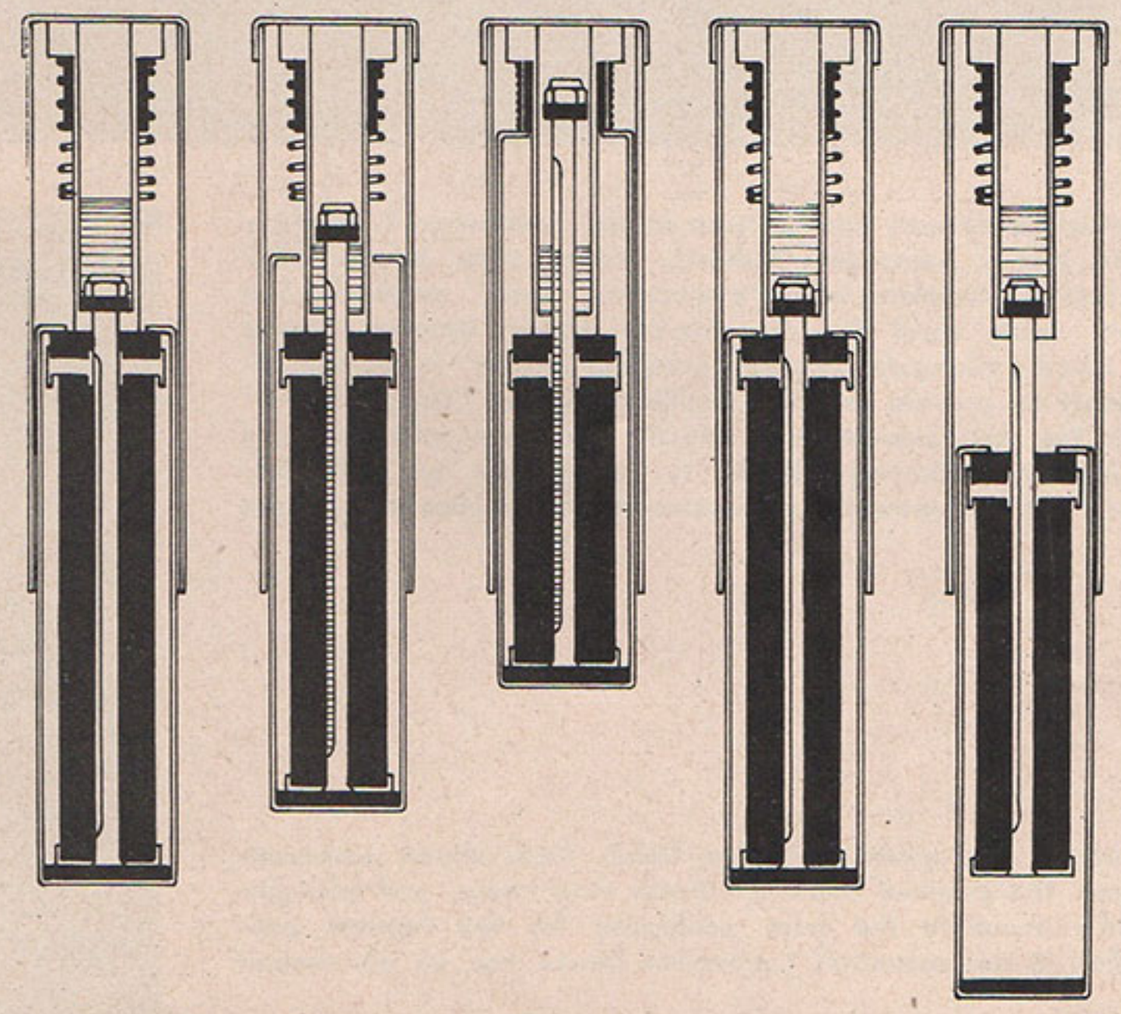
One of the main features of the Dunlop suspension is that the rubber spring is compressed as the road wheel moves upwards, and that in the reverse direction the energy built up in the rubber extends the strut back through the normal riding and 'no-load' position to the maximum recoil point before resuming the normal riding position. The Dunlop suspension has the outstanding feature that recoil is progressively cushioned and restricted as soon as the no-load position has been passed (full advantage being taken of the force induced by wheel mass acceleration). Provision is made for styling shrouds completely to encase the telescopic members where necessary for reasons of individual design. The fork end lugs are designed to permit quick wheel change and to simplify mudguard stays.

It is found in practice that machines fitted with both front and rear rubber suspensions based on these new principles give a remarkable improvement in comfort and control, as well as increased braking efficiency and tractive effort; moreover, the flexible rear suspension permits the use of a more sensitive front suspension, since the total forces are more evenly distributed.

Although the primary object at the moment is to provide a suspension for forward manufacturing programmes to help the industry to hold its own in world markets, it is hoped that in suitable instances conversion of existing machines may in time be possible.



ABOVE—Exploded view of fork assembly. Inset top, normal position, left, fully extended, right, fully compressed. Fork movement is ample

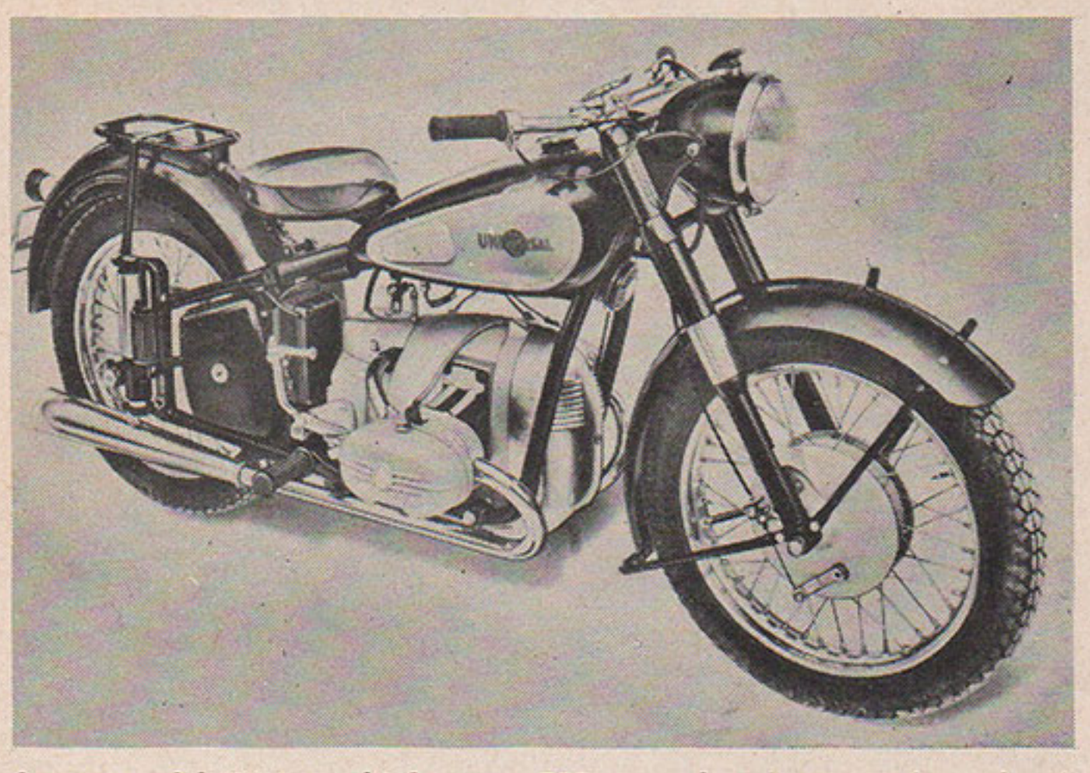


Five representative positions of Dunlop rubber rear suspension system. Overload coil spring at top protects rubber elements from too much extension or depression. Automatic transferring of damping fluid indicated above and below hex nut. Total weight of Dunlop rubber suspension is very light

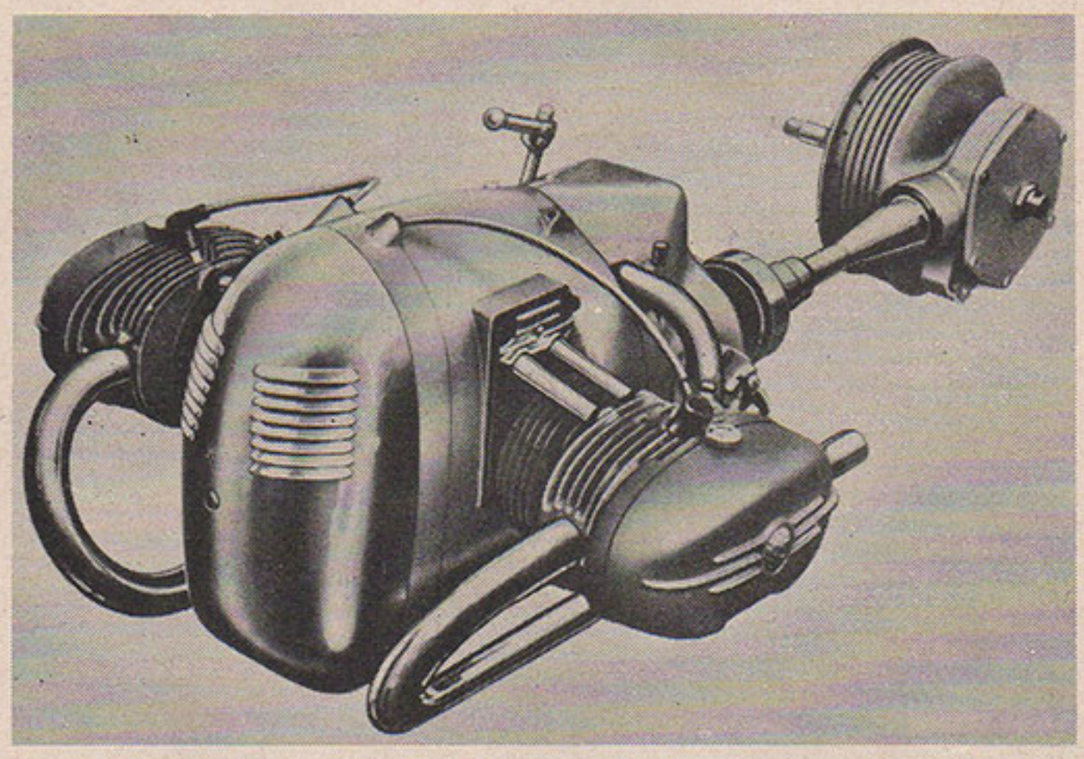
TRENDS in OPPOSED TWINS

THREE NEWCOMERS OF INTEREST

The Swiss UNIVERSAL

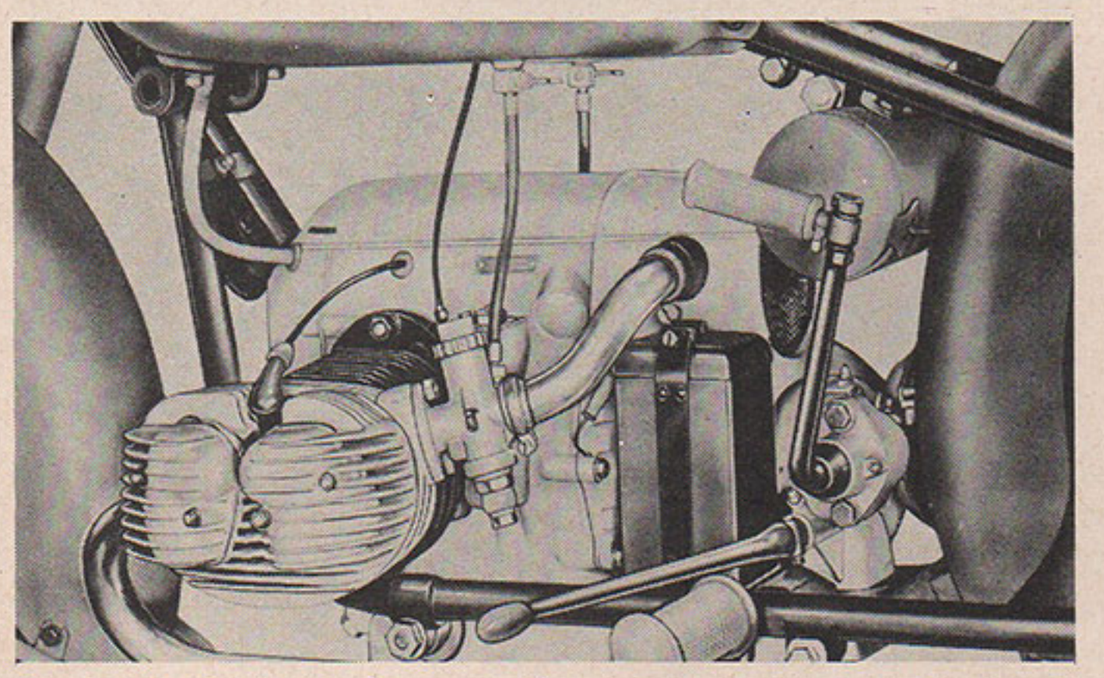


Sports model "Universal" features 580 cc push-rod operated overhead valve engine, foot shift four speed transmission, telescopic front forks, plunger style rear springing, shaft drive. A well-finished machine

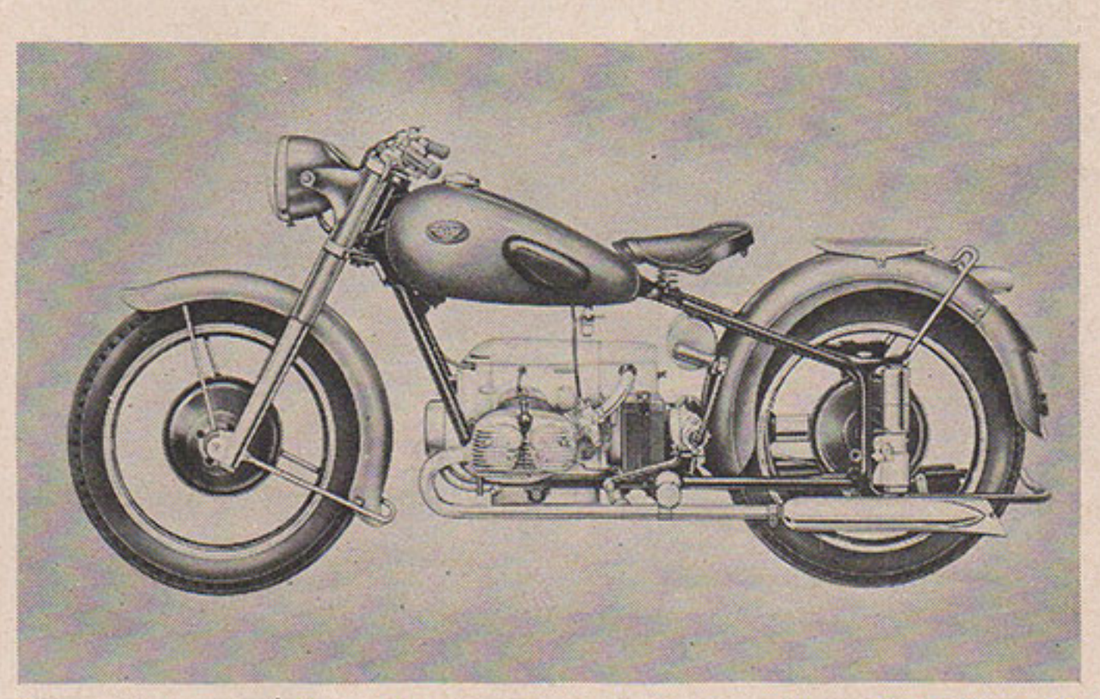


Engine, transmission, shaft driving mechanism, and rear wheel hub assembly present clean lines and handsome appearance. Bore 72 mm, stroke 71 mm, bhp — 26 at 5500 rpm. Compression ratio — 7:1

Germany's Newest ZUNDAPP

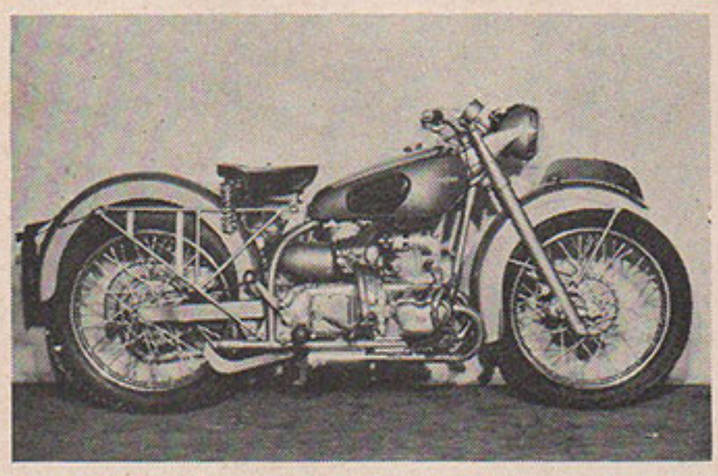


Overhead valve (rocker boxes are finned and bolted to light alloy head) engine has two carburetors, enclosed electrical components, built-in air cleaner. Separate mufflers are used. Neat battery mounting is shown

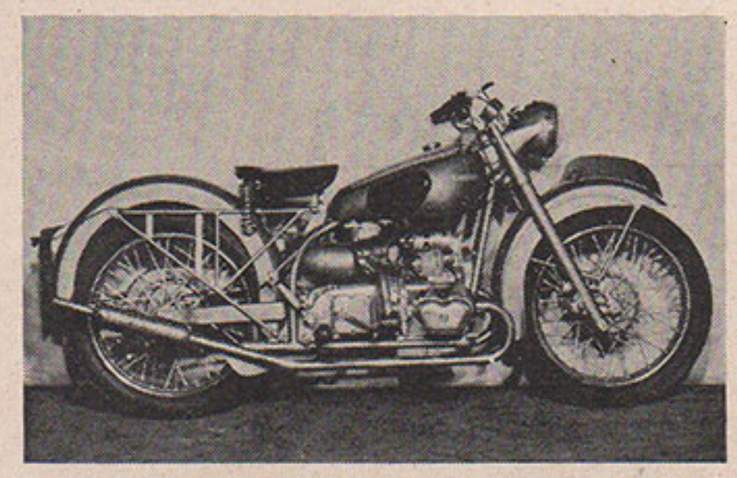


Trim appearance of machine is enhanced by clean lines of engine unit and freedom from knick-knacks. Telescopic forks, rear springing, and shaft drive lend modern note. Foot gear change pedal on left side

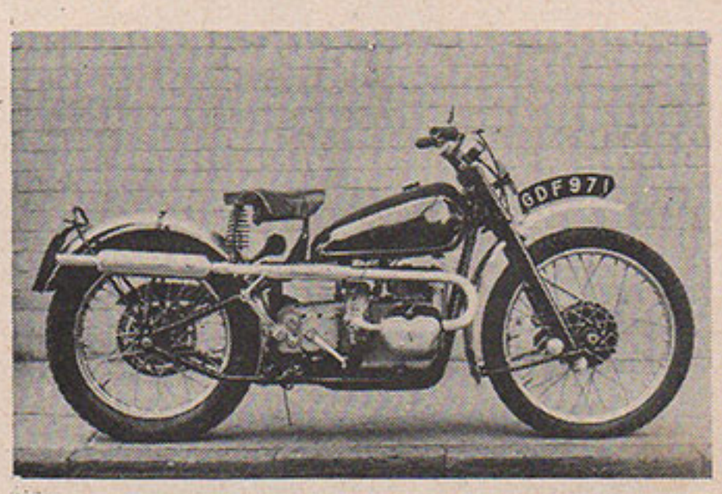
Britain's DOUGLAS in Latest Form



MARK III Deluxe model has 348 cc ohv engine, compression ratio 7.25:1, twin Amal carburetors. Swinging fork torsion bar rear suspension. Weight 350 lbs. Roll-type stand is used



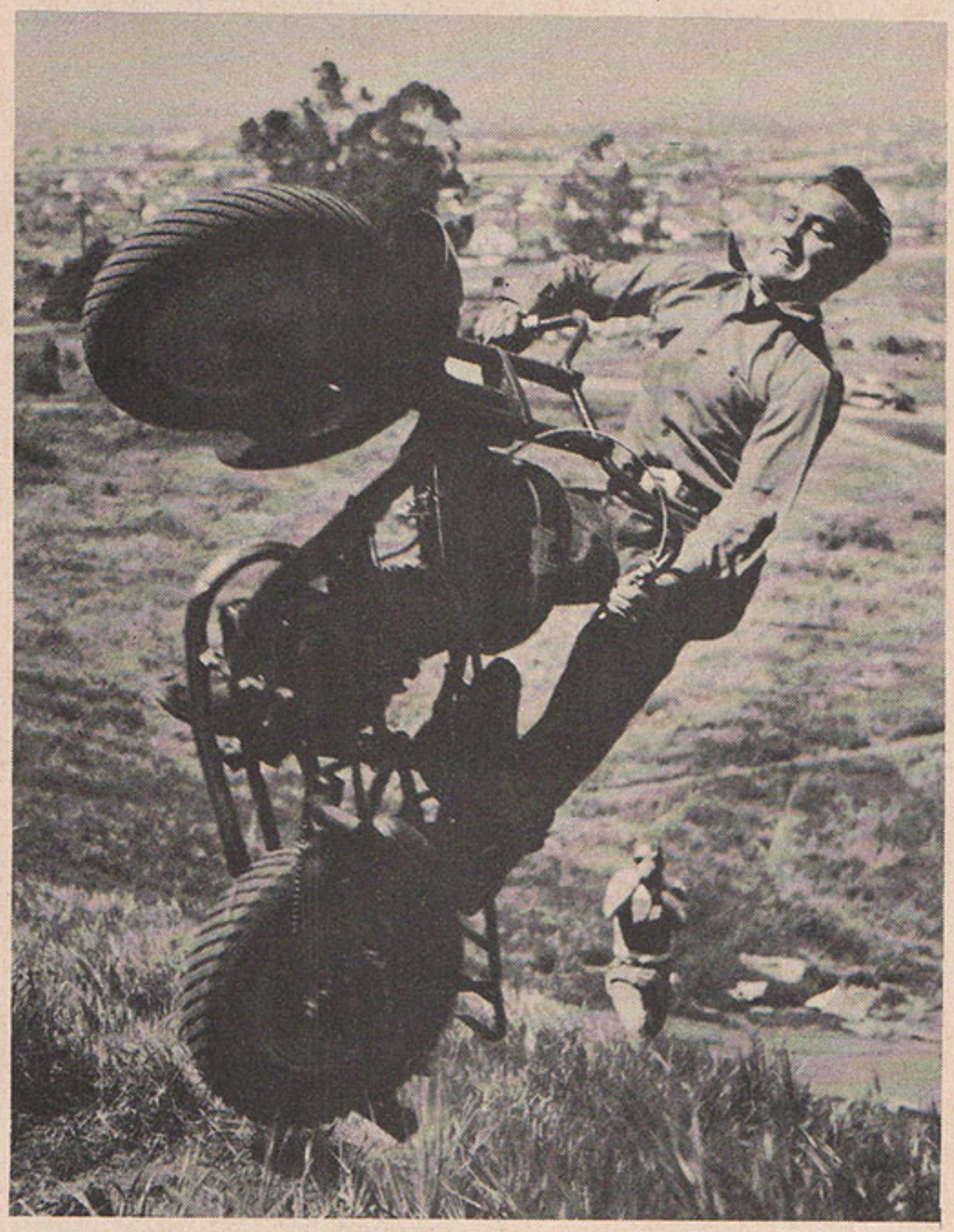
Model "80 Plus" is intended for sports riders. Same general specifications as Mark III Deluxe. Features upswept mufflers, sports ratio gearbox, additional ground clearance for trials



Competition Model has smaller tank, light fenders, high level exhaust pipes, 6¼" ground clearance, modified "Radiadraulic" front fork. Saddle and pegs positioned high for clearance

Current NEWS and VIEWS

MOTORCYCLING—WORDS AND PICTURES



A TERRIFIC LIGHTWEIGHT

by Bob Schanz

THERE *is* something new in motorcycles and it is made in the United States, too. It's the new Powell P-81 "Custom." This revolutionary lightweight is a far cry from the English type that has been enjoying so much popularity lately.

This new job, appropriately called the "Custom," is considerably smaller than most other lightweights. It measures only 72 inches in length and has a 49½-inch wheel base. It weighs slightly under 200 pounds and stands 41½ inches high at the handlebars. With its 10-horsepower engine it has the amazing power to weight ratio of 20 pounds per horsepower.

The main drawback to the Powell is its lack of a speedometer. The manufacturer's claim of speeds up to 65 mph is indeed conservative. My '49 job will do an honest 75 under ideal conditions. By ideal conditions I don't mean down a 90-degree hill, I mean on a level road with the wind in my favor. **(How much wind?—ED.)**

The pick-up and acceleration on this single-speed machine is nothing short of amazing. A full twist of the throttle from an idle will send the rider back a bit in the saddle and the cycle takes off at a very respectable speed. The manufacturer claims a faster pick-up than most cars. I have raced new cars on the getaway from a traffic light and have beaten them. Most cars will get a slight edge in first gear but by the time the motorist shifts into second I would be out in front of him and I'd hold that position up to top speed. **(Up to what top speed—75 mph?—ED.)**

The Powell Custom is a value, too. It lists for about $290.00 FOB the factory at Compton, California. All in all the machine will beat anything in its class as far as speed, acceleration, beauty, and value are concerned. This goes to prove that the Powell P-81 Custom for 1950 is truly an American lightweight. **(You betcha—ED.)**

PEE WEE CULLUM RETURNS TO BRITAIN

SPEAKING of Short Track racing reminded us of a recent news story about Pee Wee Cullum, one of America's Short Track pioneers and currently the only American riding Short Track in England.

Several months ago, the Manchester Team signed Pee Wee for the 1950 season. From Sierra Madre, California, to Manchester, England was about 6,000 miles. Pee Wee's little, but he has big ideas. He'd save his bucks but still get to the Tight Little Island.

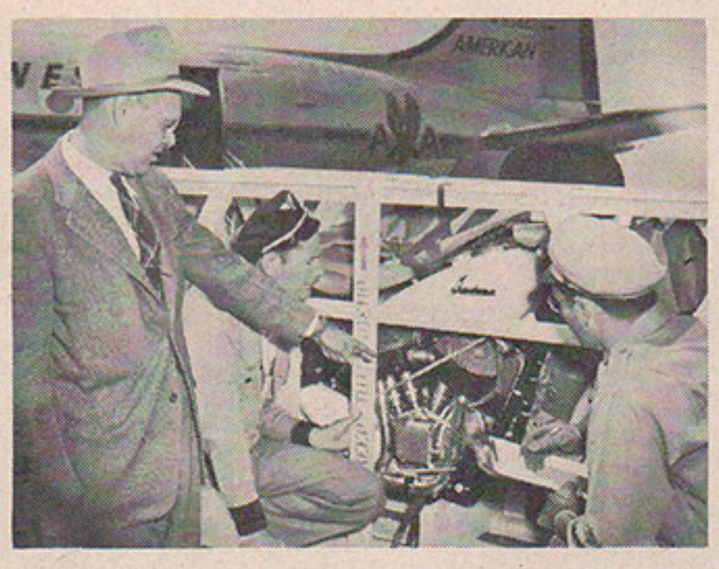
Our hero reached New York by—well, we don't know how! Next, the little man signed on a freighter as an able bodied seaman, or sumpin'. The trip over was rough, very rough, and Pee Wee's pantry became emptied regularly—over the rail! But he made Manchester and is again riding at the top of his form. Good luck, Pee Wee.

THE PASADENA (California) Star News, a daily newspaper long noted for its policy of conservatism, shocked and delighted its readers (shocked those who do not approve of motorcycles, delighted those who do!) Saturday, May 6, 1950, by printing only one picture on the front page. A big picture, too.

The picture showed two motorcycles with sidecars racing in the streets of Neuwied, Germany! (The two BMW's, complete with riders and passengers, made a highly dramatic picture as they bent a stiff right-hander with the sidecars mounted on the right side of the machines!)

What does it mean? We like to think that City Editor Arnold Huss, a real man's man, wanted to show his readers what real motorcycle racing looks like! If so, he succeeded!

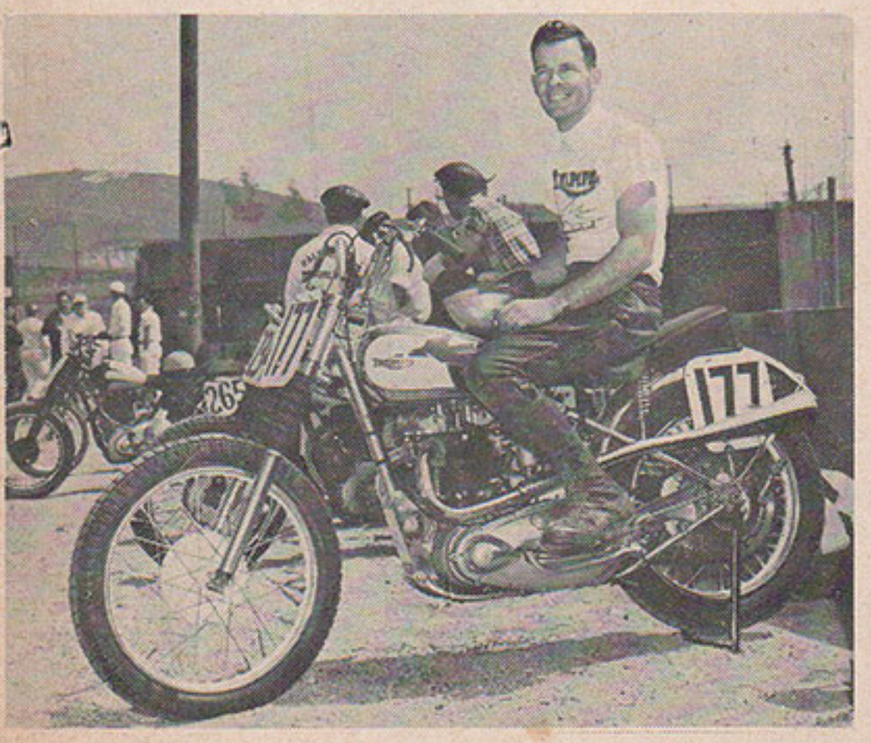
FLYING INDIANS



Six 1950 police model Indians, needed posthaste by the El Paso Police Dept., recently were shipped by air from Massachusetts to Texas. This mode of shipment was instituted by Vic Cox, Indian district manager at Dallas, shown here pointing at engine. Packed in special lightweight crates, the 700-lb. machines, complete with two-way radios, reached El Paso by American Airlines in less than twenty-four hours

WALT FULTON RACER—SALESMAN

One of the real gentlemen of our sport, Walt Fulton, sits astride his "Trophy-Thunderbird" Triumph. Fulton is sales rep for Mustang Motorcycle Corp., covering Southwest Territory



FRITZIE BAER— SOLON of SPORT at LACONIA

FRITZIE BAER, for many years one of the most widely known and best loved men in the motorcycle sporting world is resigning from the Indian Motorcycle Company to take an appointment as managing director of one of the most beautiful scenic parks in the east—the Belknap Recreation Area in New Hampshire—the one million dollar park where the famous Laconia 100-Mile Road Race Championship is run each June.

Fritzie has a host of friends and admirers from coast to coast among dealers and riders of all makes of motorcycles, both American and foreign, and while he has worked loyally and faithfully for Indian since 1919, he has proven extremely fair and non-partisan from a sporting angle throughout his activities when refereeing, judging, or announcing competitive events. Year after year, he has announced such major events as the 25-Mile National at Springfield, Illinois, the 15-Mile National at Milwaukee, the Langhorne 100-Miler, the Daytona Road Races, and of course, Laconia National Championships. He has thrilled the crowds with his gripping and rapid-fire commentary—keeping all within earshot well posted as the races have progressed. And although an Indian factory man, Fritzie has always been the first to hail the winner, hand him the mike so he could say a few words to the crowd—acclaim him a hero, and announce to the crowd the facts about man and motor, regardless of the make involved.

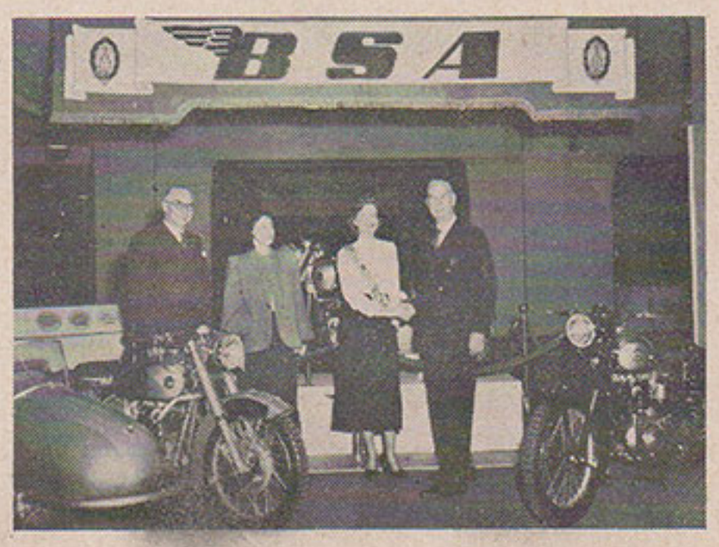
This man Baer has proved himself an inexhaustible worker, giving freely of his vast energy, his ability and his time to promote the sport wherever he has traveled. Back in 1919, as a boy, he started work at the Indian factory, and through the years has, step by step, ascended to the stage of accomplishment and prestige which makes his most recent elevation a logical one indeed. In his younger days, Fritzie was a hillclimb and track rider (and a winner on many occasions). Later, he was a successful dealer and motorcycle merchant and,

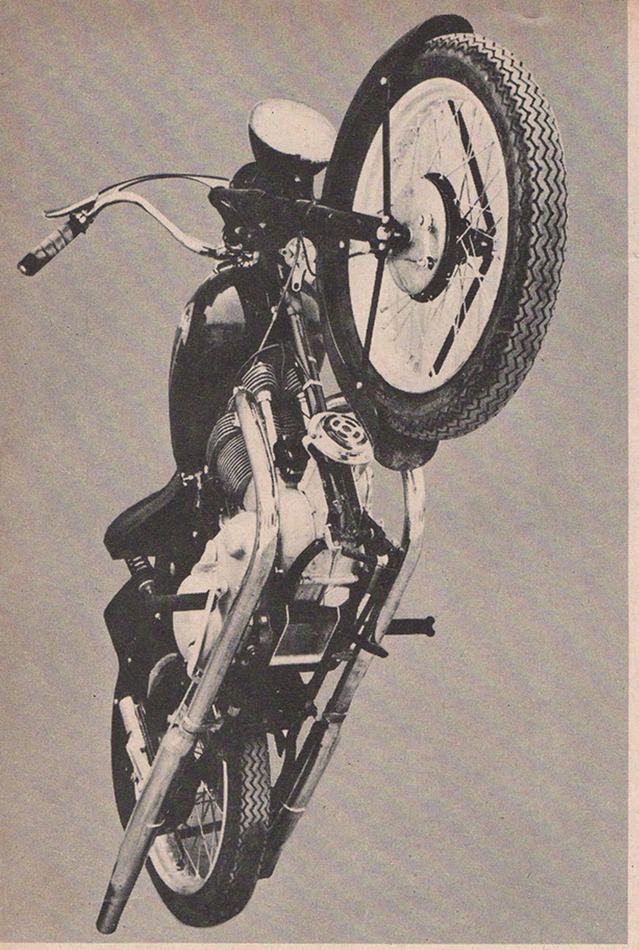
perhaps most of all, his star has shown the brightest when promoting the sport of motorcycling.

For instance, in 1933 he organized in Springfield, Massachusetts, the group called Fritzie's Roamers, and the next year that club was awarded the AMA National Championship for being the most active and most successful club in the United States. Working in conjunction with the Springfield Safety Council, Fritzie started the safety movement among clubs—an activity so successful that it was later taken up by numerous clubs across the nation and ultimately made a permanent part of the AMA promotion. Fritzie was for two years president of the New England Motorcycle Dealers' Association, Chairman of the Motorcycle Division of the Hampshire County Safety Council, two years president of the Triple "A" Golf League, and president of the Memorial Golf Club in Springfield. He was AMA New England District Referee from 1927 to 1932, later was again requested to take back the referee's job, which he did again fill from 1934 to 1940.

During the war years, Baer filled a key executive position until the Indian Company turned his services over to the Director of Civilian Defense, under whom he worked, coordinating motorcycle groups into the national defense network. Since the war he has occupied the position of Director of Dealer Relations for Indian, an activity which has taken him across the nation and back again.

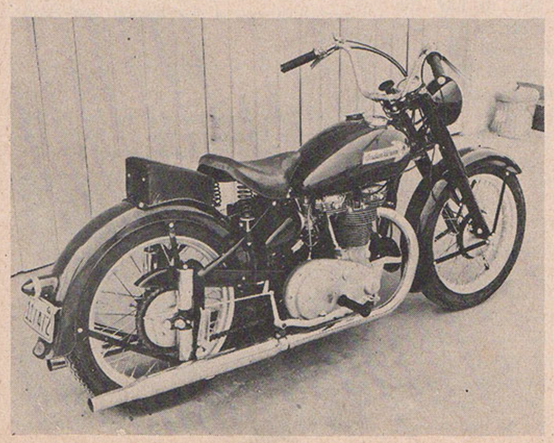
British Sales Ambassadors, Sir James Leek and Major Watling viewed at recent N.Y. Motorcycle Show. Sir James heads BSA firm





ABOVE—Road surface view of the Warrior. Single front frame tube supports forward ends of cradle-type bottom frame assembly. Horn mounting and graceful lines of dual exhaust system are clearly shown. Machine was held upright by champion Ed Kretz while photo was made, proving the light weight of this 500 cc vertical twin

BELOW—Sponge rubber, form-fitting saddle, smooth contours of gas tank, high rise handlebars, and semi-valanced fenders make the Indian 500 cc Warrior vertical twin a very sporty looking machine. Rear braking accomplished with right foot, gear-changing with left foot

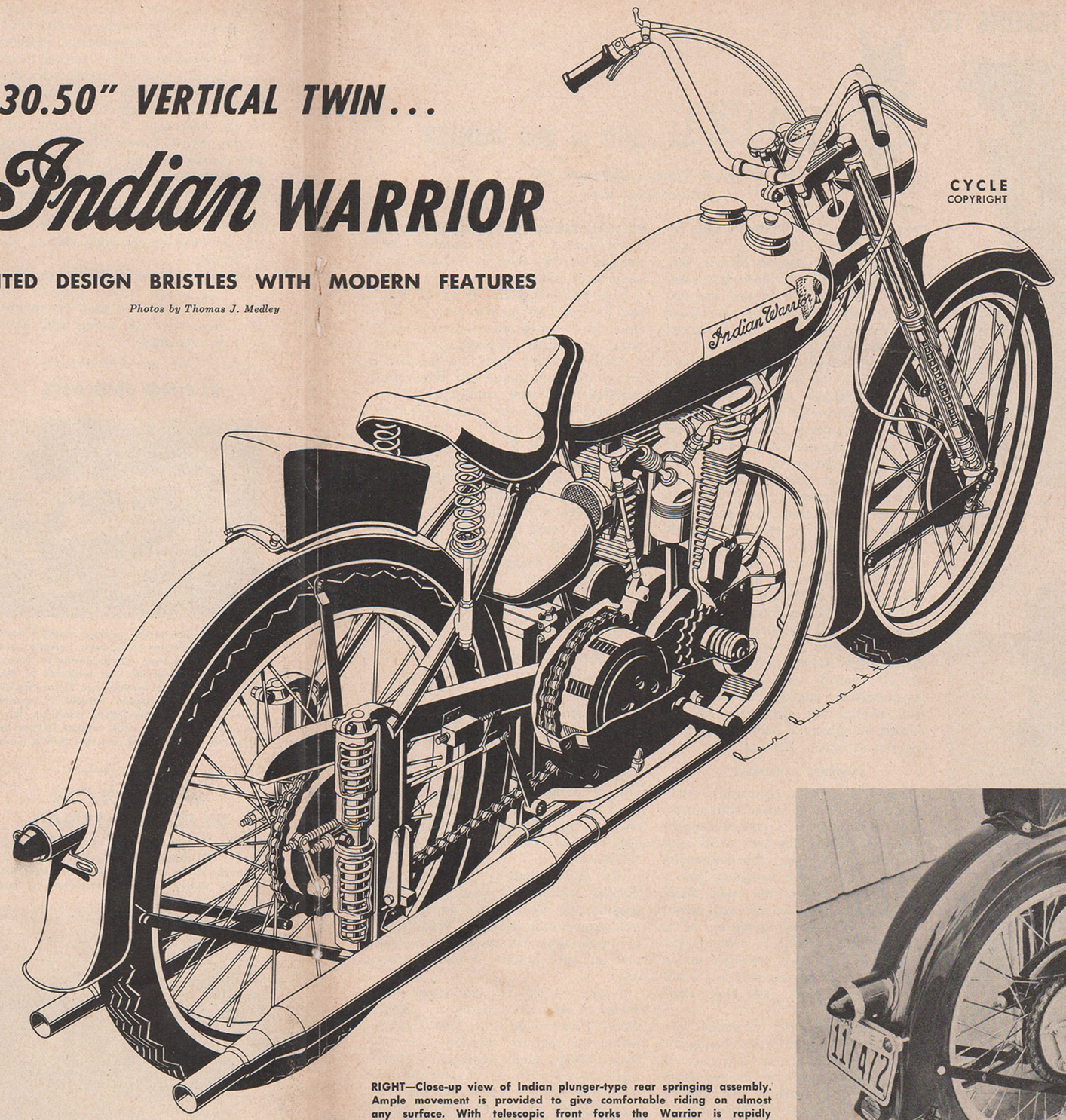


A NEW 30.50" VERTICAL TWIN...

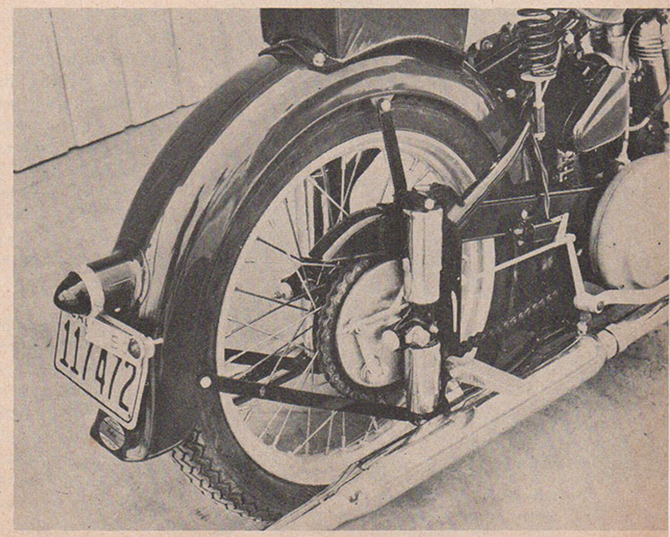
THE *Indian* WARRIOR

LONG-AWAITED DESIGN BRISTLES WITH MODERN FEATURES

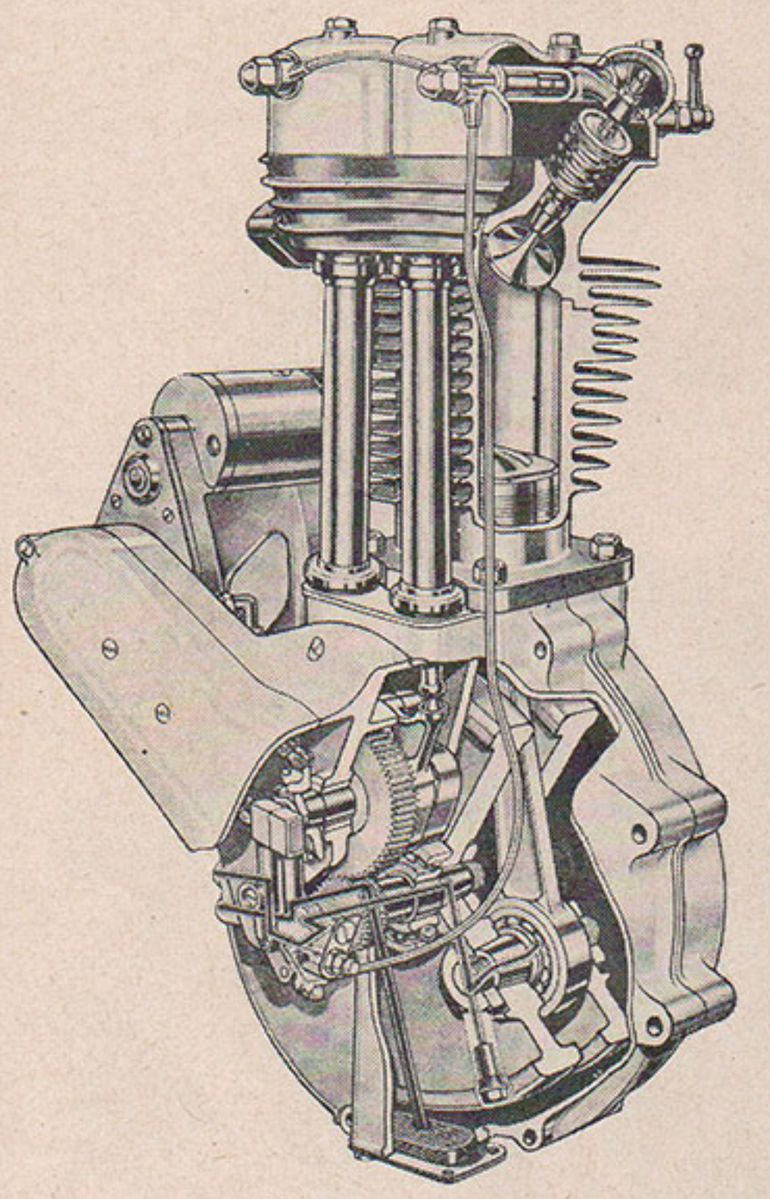
Photos by Thomas J. Medley



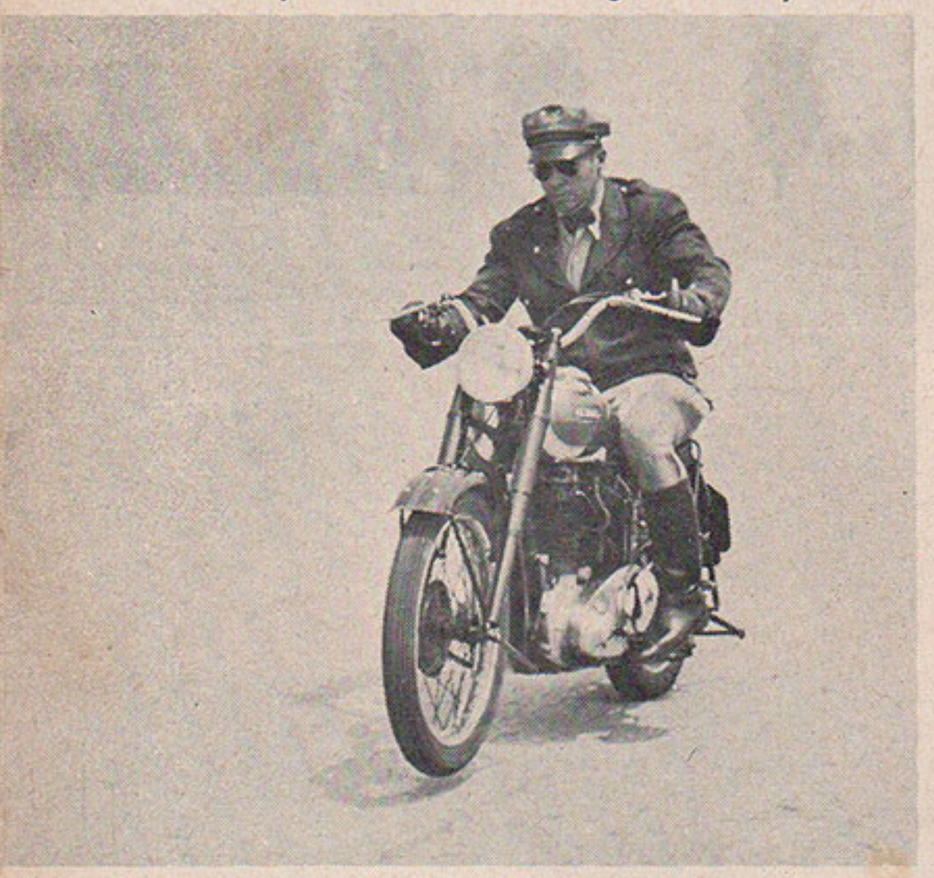
RIGHT—Close-up view of Indian plunger-type rear springing assembly. Ample movement is provided to give comfortable riding on almost any surface. With telescopic front forks the Warrior is rapidly setting a new standard in motorcycle riding comfort and handling. Vertical twin engine has overhead valves, rated at 30 bhp, provides "over 90 mph" top speed, features special bi-metal valves and Amal carburetor, magneto ignition, one-piece crankshaft assembly with central flywheel, aluminum cylinders with steel liners, ample cooling fins



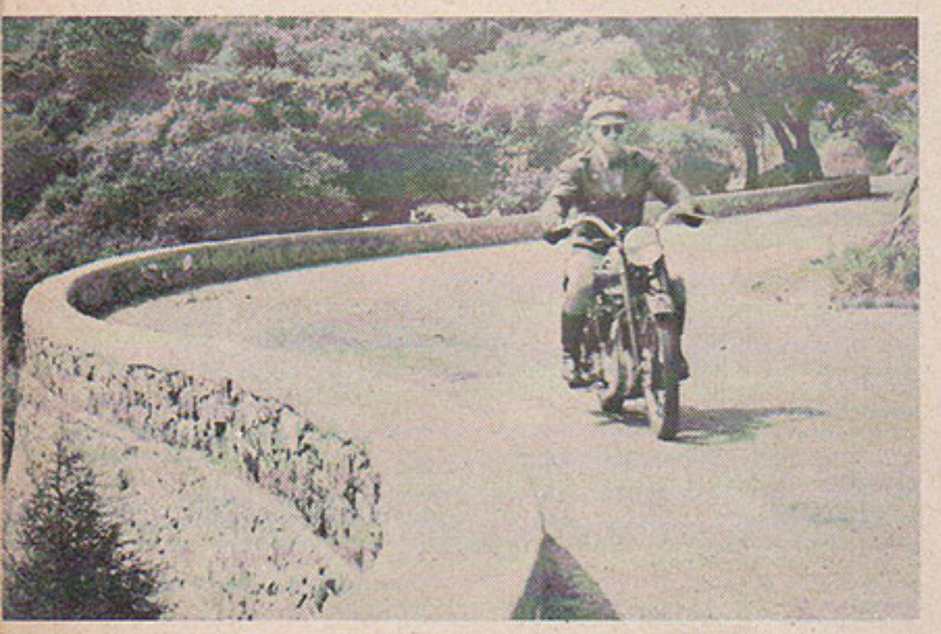
TESTING THE ARIEL 500 cc RED HUNTER



Cutaway view of Ariel Red Hunter engine discloses straight-forward, proven design features. Hefty lower end bearing is clearly visible



Officer Filker tests for clutch grip. Front wheel is clearly well off the ground proving clutch can transmit full engine torque from standstill



This gracefully sweeping road is, in reality, a rather steep mountain road. Ariel "handleability" was appreciated here said Officer Filker

by Officer H. Filker, Alhambra P.D.

Photos by Thomas J. Medley

THIS Ariel "Red Hunter" single, engine number MN494, is the shop demonstrator of Johnson Motors, Inc., Pasadena. It has been ridden, but hard!, by everybody and his brother and was not specially prepared for extra good performance. No extras or accessories had been added.

The 1950 Ariels come equipped with a very handy left sidestand. The stand is spring-loaded and automatically swings upward when the weight of the machine is removed from it. This feature was at once noticeable when rolling the machine out of the shop.

A few other points of interest include: the instrument panel light can be "untwisted" from the panel and readily used for an extension trouble lamp—it has nearly 6 ft. of cord attached to it, throttle tension can be adjusted by a set screw and the selected adjustment anchored tight by a locknut, semi-high rise handlebars found to be very comfortable and properly shaped for instant response in rough going, the saddle height has been raised 1½" over the 1949 models which provides better leg positioning and prevents the saddle from striking the rear fender on bad bumps, the quality of painting and plating was extremely lustrous.

STARTING A "SINGLE"

There is a knack required to kick-start any big "single" fitted with a compression release. The Ariel features such a release. Depress the kick pedal until compression is felt, push the compression release lever on the handlebar just a hair, further depress the pedal about another inch. Then let the pedal return to its normal position at the top of its arc and kick the engine over quickly. This Ariel responded favorably to the accepted procedure very well, but a half retarded spark made "one kick" starts a certainty.

Ariel pushrod tubes use rubber gaskets at top and bottom for sealing the tubes against oil leaks. The exhaust pushrod upper gasket is situated about 2" from the hot exhaust port. No oil leakage was seen, but this feature of design looks somewhat poor.

The steering damper was loose when the machine was accepted for test. At no time was the damper tightened down. No road condition; pot holes, big bumps, sandy surface, or gravel required the damper. Perhaps later models will dispense with this item.

Tire pressures were; front 25 lbs., rear 23 lbs. Two pounds more in the front tire suited my personal preference better, particularly for paved road turns.

Ariel telescopic forks are standard, providing a soft, gentle ride, while the patented Ariel rear springing system was very effective on rough surfaces. Front fork travel of 7" is more than enough while the 3" travel of the rear wheel might be increased to possibly 4" to provide the acme in easy riding over "pot hole" pavement.

Foot pegs, while adjustable to rider's preference, could be made to drag too easily. If raised high enough to prevent dragging, an exaggerated bent knee angle would result.

INCORRECT AMAL JET

On the road, the bike had a tendency to "surge" at high rpm, a fault traced to an Amal No. 140 jet in the carburetor. Replacement with a recommended No. 160 jet cured the trouble at once. The smaller jet was to purposely limit top speed on a shop demonstrator for safety's sake. The speeds recorded in the Performance Chart herewith were recorded with the No. 140 jet. After returning to the shop and changing the jet, I did not have the opportunity to return to the "Timing Trap" for further tests. I had to direct to my regular police officer's job.

The muffler was a straight-through Burgess, packed with spun glass. This construction absorbs the sound very well at practically any speed. Wide open in low for about 700 ft. produces a loud roar but such practice is rarely necessary.

I was especially well impressed with details of refinement visible in several places. I owned an Ariel Red Hunter before the war and was cognizant of these changes: larger generator, voltage regulator, complete set of good quality tools, a specially effective cam-type engine sprocket shock absorber, and the four point rubber mounting of the gas tank.

Some grease leakage from the rear springing units was noticeable after

severe usage. Perhaps they were too full to start with. A period of vibration at 55-57 mph was noticeable. This speed range is ideal for touring and it is regrettable that this particular machine vibrated a bit at that particular speed. Past 70 mph the engine could have been a four cylinder, it was amazingly smooth and silky.

HEAVIER THAN CATALOGUED

Tested on an approved weigh-bridge the Ariel Red Hunter returned these readings: Front wheel loading 185 lbs., rear wheel loading 235 lbs. Total weight 420 lbs. Weighed with rider: front 245 lbs., rear 370 lbs. Speedometer checking showed: up to 65 mph—2 mph slow, 65 to 80 mph—3 mph fast. Turning circle: to left, 14 ft., 2 in., to right, 14 ft., 9¼ in.

In summation, the Ariel Red Hunter is designed to be a sport type motorcycle appealing to riders who do highway riding at moderately high rates of speed as well as a reasonable amount of cow-trailing, hare and hound riding, etc. Suitable especially for trials riding as the good slow speed engine torque and the late style handlebars make the bike nearly perfect for slow speed maneuverability.

PERFORMANCE SUMMARY

Acceleration

*Standing Start to 40 mph— 5.1 sec.
**Standing Start to 60 mph—10.9 sec.
***Standing Start to 75 mph—21.2 sec.

*Low gear only
**Low and second
***Three gears used

Braking

From 25 to stopped, rear brake only—47′ 6″
From 25 to stopped, front brake only—27′ 6″
From 25 to stopped with both brakes—23′ 3″

Slow Running

High gear without "chain snatch," 14-15 mph

Speed

Maximum in low—40 mph
Maximum in second—61 mph
Maximum in third—78 mph
Maximum in high—87 mph

General Specifications

ENGINE. 497 cc., bore 81.8 mm, stroke 95 mm. (3.22 x 3.74″ = 30.4 cu. in.), single cylinder. Overhead valves. Engine brake horsepower—24.6 @ 6000 rpm. Compression ratio 6.8-1. Specially bench tested and tuned. Ground and polished ports and cylinder head. Forged steel flywheels, polished all over. Large diameter mainshafts mounted on two heavy duty roller bearings and one ball bearing. Extra large double roller bearing big end with dural roller retainers. Aluminum piston, two compression rings and one oil ring. Dry sump lubrication system employing dual plunger pumps, separate ¾ gallon capacity oil tank.

GEAR BOX. Four speed Burman, foot control. Ratios; 12.6, 8.0, 6.0, 4.7. Multi plate clutch controlled by handlebar lever.

EXHAUST SYSTEM. Single exhaust port into low level exhaust pipe and muffler. Pipe and muffler heavily chrome plated.

POWER DRIVE. Front roller chain, ½″ pitch, 81 links. Rear roller chain, ⅝″ pitch, 95 links. 23 tooth engine sprocket. Engine shaft shock absorber sprocket drive. Front chain fully enclosed in polished aluminum oil bath chain case. Rear chain protected by top and bottom guards.

WHEELS. Steel rims, chromed, centers painted red with gold striping. Dunlop tires, rear 3.25 x 19 studded, front 3.00 x 20, ribbed.

FRAME. Cradle type, Aero quality tubing. All joints are brazed. Plunger type rear wheel springing available.

FORKS. Improved telescopic. Fully automatic damping. Maximum travel—6¼″.

BRAKES. 7″ diameter, high tensile iron brake drums. Progressive action fulcrum adjustment.

TANKS. 3¼ gal. gas tank, ¾ gal. oil tank. All steel.

STANDS. Spring-up rear stand, tubular front stand, prop stand.

MUDGUARDS. Steel, robust ribbed section. Tail of rear mudguard hinged for easy wheel removal.

IGNITION and LIGHTING. Magdyno instrument. 7½″ head lamp, dimmer switch on handlebar. Battery, 6 volt, mounted on steel platform under saddle. Automatic voltage regulator.

EQUIPMENT. Complete kit of tools, grease gun, tire pump, electric horn, Smith's 120 mph speedometer, ammeter in instrument panel, Lycett saddle.

Tuning the Motorcycle Engine

THE INFORMATION HEREWITH IS APPLICABLE TO MOST MOTORCYCLE ENGINES

by Tim Witham

Drawings by Bryce Gillespie

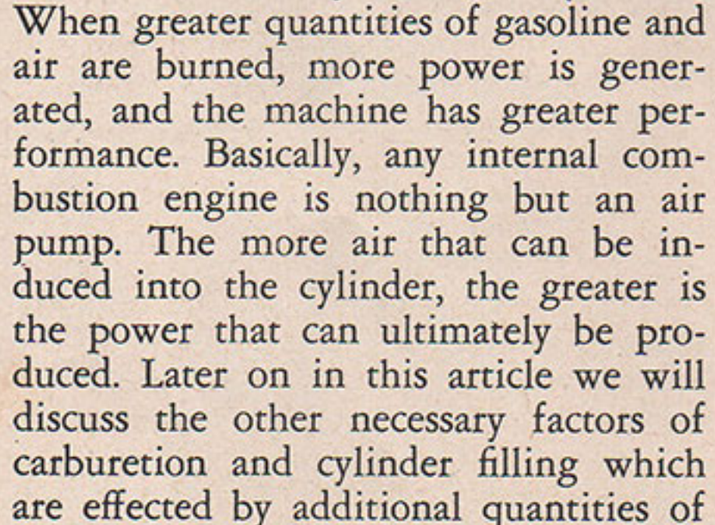
(This article will appear in several installments in CYCLE magazine. It has been prepared by our Technical Writer for the purpose of removing the veil of mystery which has long enveloped the secrets of tuning engines for greater power output. It is simply worded, amply illustrated, and fully comprehensive. Save each issue of CYCLE for future reference—ED.)

THE MOTORCYCLE engine is an internal combustion engine, sometimes referred to as a heat engine. Internal combustion, or heat, engines are power units which convert generated heat into useful work. Motorcycles are propelled as a result of the heat generated by burning a mixture of gasoline and air within the cylinder or cylinders. When greater quantities of gasoline and air are burned, more power is generated, and the machine has greater performance. Basically, any internal combustion engine is nothing but an air pump. The more air that can be induced into the cylinder, the greater is the power that can ultimately be produced. Later on in this article we will discuss the other necessary factors of carburetion and cylinder filling which are effected by additional quantities of air being induced into an engine.

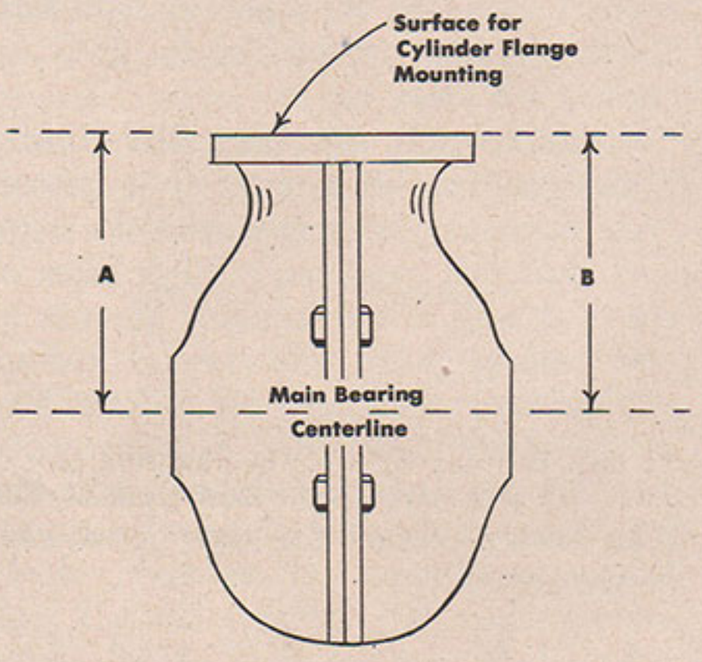
JOULE'S LAW

A very important law of physics applies when studying modifications to be made to an engine if additional power is to be gained. The relationship between the amount of heat generated and the power derived from this heat is expressed as "Joule's Law." Joule was a physicist who originally determined this relationship, and his Law states basically that the molecular energy of a gas (a mixture of gasoline and air is considered a gas) is directly proportional to the temperature (heat) of the gas. This is the fundamental reason for raising the compression ratio of an engine. Several other physics laws apply when increasing the power of an engine, too, but we will keep this article more on a practical basis than on a full explanation of the basic theories behind the work to be done.

The important point is that increasing of compression is for the purpose of increasing the temperature of the gas in the combustion chamber just prior to ignition. Higher compression increases the heat of the gas mixture which, when ignited, has the advantage of releasing a still greater potential amount of heat for conversion into useful work.

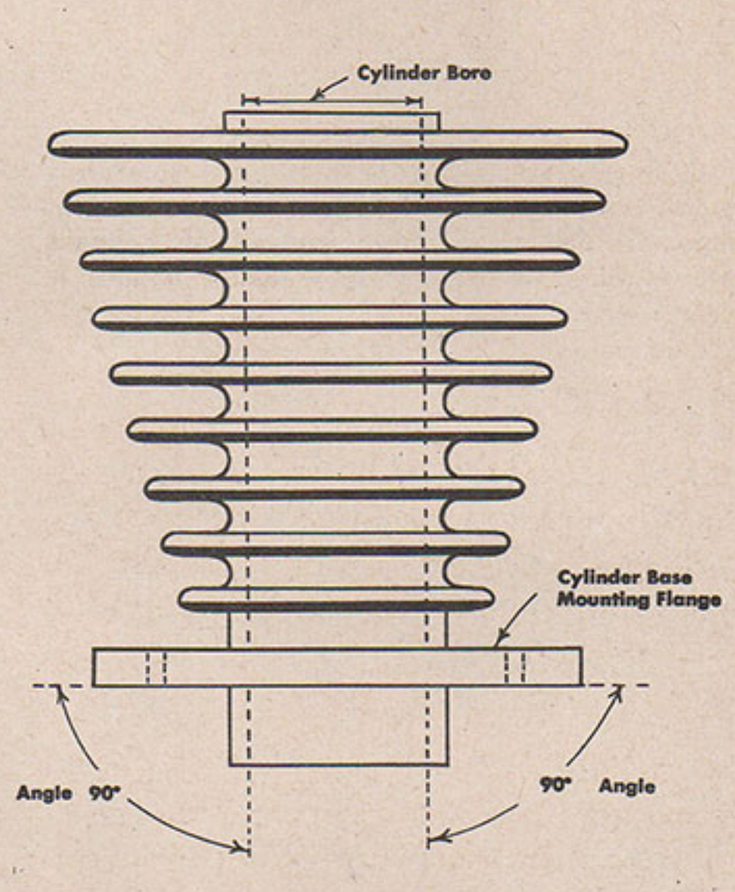


DRAWING NO. 1—Aligning the flywheels. Measurements A and B to be equal in same plane



DRAWING NO. 2—Aligning the crankcases. Bolt both halves of cases together securely. Measurements A and B to be equal and in same plane. This job must be carefully done

It is necessary, of course, to fill the cylinder with a mixture to ultimately produce any power. Persuading mixture to enter a cylinder can be effected in several ways. This persuasion is commonly called "engine breathing." Before we try to improve an engine's breathing, however, it is of prime importance to have the engine in as near perfect mechanical alignment and proper balance as possible. These are phases of tuning not commonly considered as being equally important to the breathing properties, but proper alignment and correct balance are positively essential from a mechanical standpoint. By eliminating friction caused by misalignment of working parts, two advantages are gained; wear and tear are minimized, and the power required to overcome friction is reserved to provide increased machine performance.

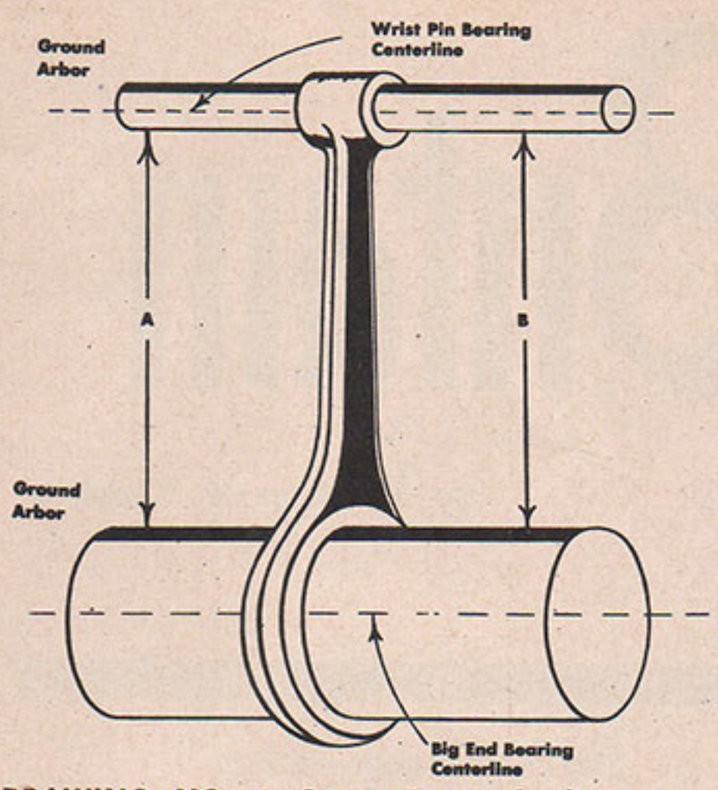


DRAWING NO. 3—Cylinder wall alignment. Remove metal from cylinder base flange then rebore cylinder to achieve proper final alignment

DISCREPANCIES IN MACHINING

Motorcycle engines that are mass-produced for ordinary road machines often have discrepancies in machining, clearances, etc., due to the use of production tooling methods and the human element resulting from making the same parts over and over again. These facts may help to explain why one stock motorcycle will often outperform another stock motorcycle of the same make.

Proper alignment covers a broad field. Perhaps proper fitting of all the parts is a better way of expressing the thought. To achieve prefect alignment, seven



DRAWING NO. 4—Connecting rod alignment. The two ground arbors must be accurately made and require a tight push-fit in the bearings. Inside micrometers, instead of calipers, are required to accurately measure A and B. Two straight-edges laid across the arbors will reveal a twisted rod as they will not lie parallel

checks for mechanical accuracy must be made. Inaccuracies must be corrected, using precision measuring devices and adequate machine shop facilities. Expert skill in machine tool operation is also essential.

FIRST

The flywheel assembly. Check to see that the centerline of the mainshafts and the centerline of the crankpin are absolutely parallel to each other and in the same plane. See sketch No. 1.

Engines with plain bearings, such as most vertical twins using a one-piece crankshaft assembly, must be trued by regrinding the rod bearing journal to achieve parallelism. The finished alignment must correspond to the same principle of parallelism as shown in sketch No. 1. Regrinding the journal, even slightly, reduces the O.D. measurement. Engines using bearing inserts present no problem in refitting the rod bearings because several thicknesses of inserts are available. The amount of stock removed by grinding must be compensated for by the use of a thicker bearing insert. If no inserts are used it is necessary, before finish grinding the journal, to metal spray or plate the journal surface oversize. The regrinding for proper alignment will then reduce the O.D. of the journal back to the correct standard size.

SECOND

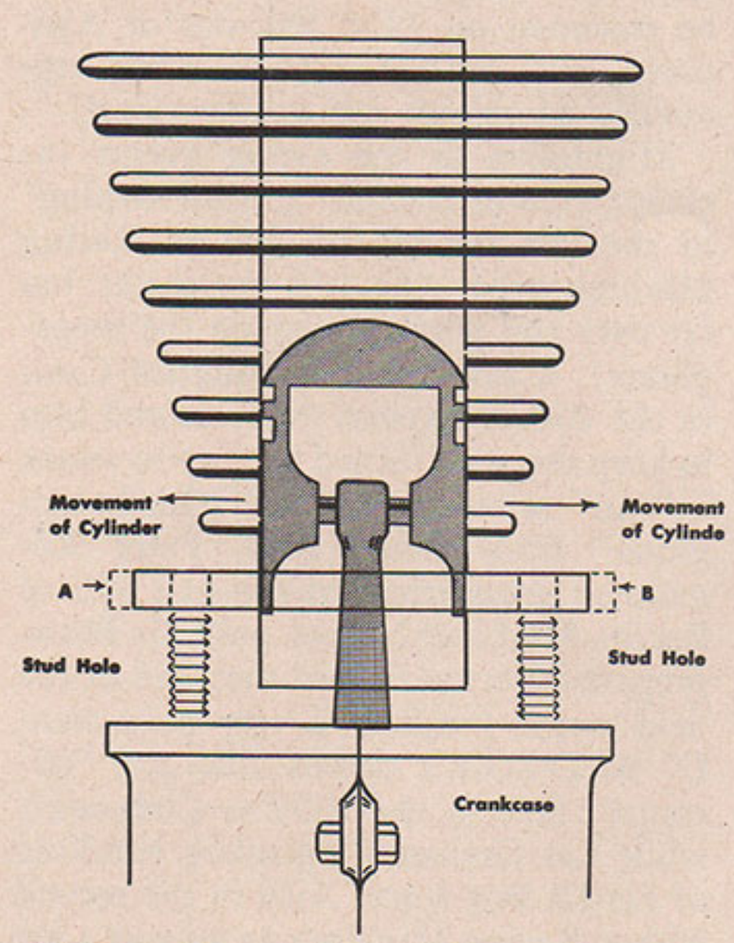
Crankcase. See that the main bearing centers are exactly parallel to the cylinder base mounting surface in the same plane. See sketch No. 2.

THIRD

Cylinder wall alignment. Determine that the cylinder wall is at a true 90° right angle to the cylinder base mounting flange. See sketch No. 3.

FOURTH

Connecting rod alignment. The two bearings, big end and wrist pin, must be exactly parallel when viewed in the same plane. Sketch No. 4 depicts the easiest method for checking this true alignment. At the same time, a check can be made to determine whether or not the rod is twisted. Straightening the rod into alignment must be done without the aid of heat. Bending the rod cold is the proper way. Steel rods require bending past the point of actual true alignment so that the "spring" of the rod back toward its true point of alignment will result in the



DRAWING NO. 5—Determining proper side clearance between wrist pin bearing and piston bosses, often overlooked in final assembly of a "hot" engine. Cylinder movement back and forth, in line with wrist pin, must be a minimum of 1/32" either way as indicated by A and B. Piston to be at Top Dead Center position

straightened rod remaining in the correct plane. In other words, the molecules of the metal must be "over-stressed" past the point of correct alignment to insure that rod will "spring" back to a point of correct alignment. A light alloy rod cannot be bent back like a steel rod. Alloy rods will stand very little bending but if any appreciable amount of lack of alignment is present, a new rod must replace the old one. Whether steel or alloy, if a rod is bent to gain proper alignment it should be scientifically examined for possible fatigue cracks or for the beginnings of fractures of the metal. Steel requires the Magnaflux process of examination, light alloy the Zyglo process. Either process is a laboratory operation but is definite assurance of the condition of the metal after bending the rod back to alignment.

FIFTH

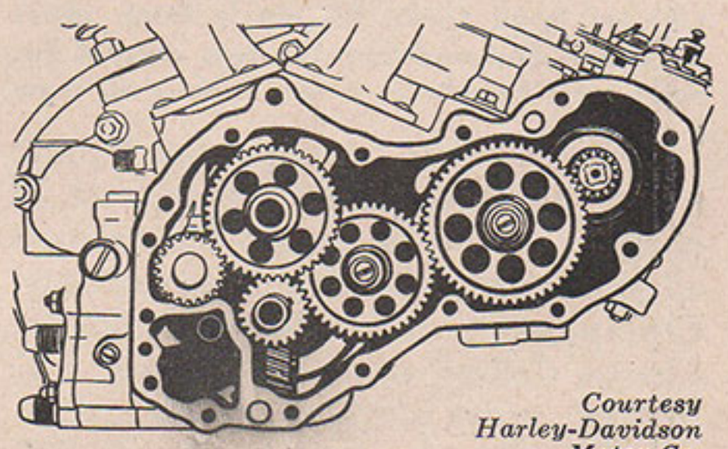
Ample wrist pin side clearance in piston. This very important measurement is often overlooked. To check this clearance, slip cylinder over piston (with rings fitted) and lower piston down to flange studs, but do not insert studs in base flange stud holes. In the plane of the wrist pin draw the cylinder toward you then reverse the movement and push it away from you. This motion proves that there is some side clearance between the piston bosses and the small end of the connecting rod. There should be sufficient side clearance to allow the cylinder flange stud holes to pass back and forth over the studs 1/32" either way. See sketch No. 5.

SIXTH

The timing side gear-train must be checked for accurate meshing of all gears and the individual clearance of each gear on its spindle or shaft.

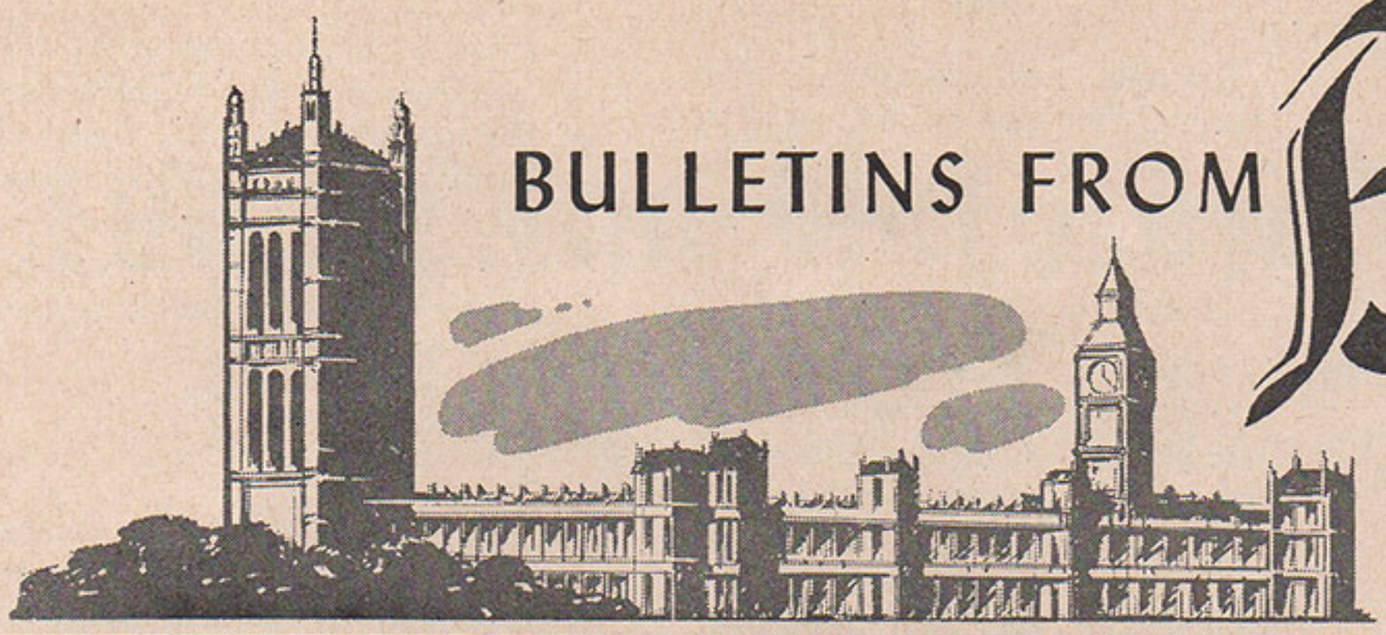
SEVENTH

Machines which utilize the cam case cover to support one or more of the timing gears or shafts (like Harley-Davidson, for example) must have the bearing centers for each support bearing checked to see that each gear shaft is properly aligned with the bearing aperture in the crankcase and the cam case cover. With the cam case cover bolted into position, complete freedom of rotation of each individual gear must be assured. Sketch No. 6 illustrates this type of construction.



Courtesy Harley-Davidson Motor Co.

DRAWING NO. 6—Illustrating timing gears requiring bearing support in cam case cover



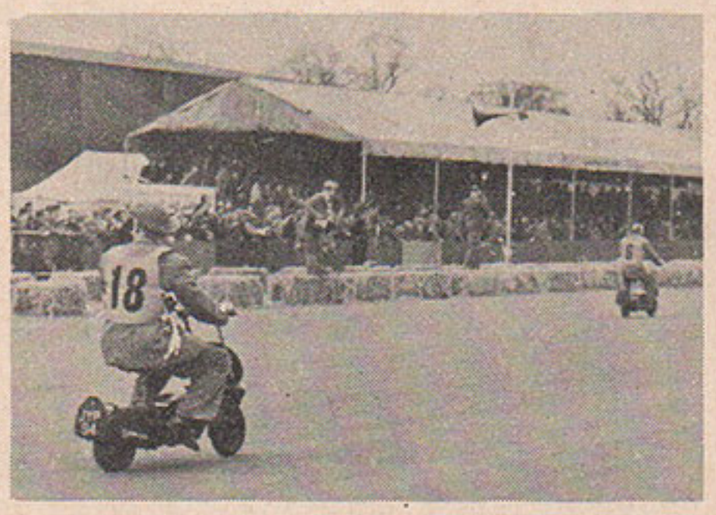
BULLETINS FROM Britain

By William H. Onslow

A Splendid Day at Silverstone

FORTY-FIVE thousand cheering fans visited Silverstone Aerodrome on Saturday, April 22nd, for the opening B.M.C.R.C. event for 1950. Air strip racing, while not true road racing, fills the bill quite adequately because speeds are high, competition is usually rather keen, and the well-behaved crowds are provided endless vantage points the better to watch the dicing.

Sponsored by *Motor Cycling,* our sporting motorcycle weekly, the whole show was excellently hosted by the Editor of the sponsoring magazine and former T.T. winner, Graham Walker. The 10 events followed one another in steady progression. "Moderns" dueled with vintage bikes in a special 350 cc five lap event, Clubmen had a spot of dicing in a 500 cc and a 1000 cc eight-lap go, while the "piece de resistance" was the one-lap Corgi Championship. This latter featured 24 previous T.T. winners indulging in a one-lap run around the course, each man on a Corgi two-stroke!



Last lap of "Corgi Championship" one-lap exhibition! Tyrell Smith, far out in front, about to receive checkered flag. The fans cheered this event most heartily as it was a bang-up show

Perhaps it was nostalgia, but I think it was just a desire on the part of all of us to see the 24 former T.T. winners all grouped together that made the Corgi Championship interlude so delightful. Charles Collier, who won the first T.T. in 1907, strove just as diligently as Harold Daniell, who won the latest T.T. race last year, while Leo Davenport, Tim Wood, Paddy Johnston, Cyril Pullin, Fred Dixon, Jim Simpson, and Graham Walker, along with all the rest, cooked up a most amusing and heartwarming spectacle. More than one of us secretly pondered what a terrific struggle on the Island course would result if all 24 men could be transformed to the individual age of peak performance of each, and all be mounted on 1950 Nortons or Ajay porcupines! Such a mythical affair vigorously stimulates the imagination!!!

Highlights in the racing events included Harold Daniell "ground-looping" in the last lap of the 500 cc Racing Machine event (he laid the model too far over and got hung up on the megaphone), a slow start by Maurice Cann in the 250 cc Experts event caused him to keep the wick turned well up to annex a "win" on the blood-red "Gambalunghino" from sunny Italy, Peter Romaime's great effort in the first 350 cc Racing Machines bash to push his Beart-prepared Norton toward the head of the field as the result of a very poor start, D. B. Durrant's detour into the "off-course" field in the 1000 cc Clubmen's, while Les Graham's legendary handling of his 7R Boy Racer Ajay in the second 350 cc Racing Machines event was a joy to watch, especially as it heralded a good omen for Les' 1950 bid for the World's 500 cc Championship which he annexed last year.

Winners of the racing events were:

250 cc Experts—8 laps
Maurice Cann—Guzzi

Vintage Machines—5 laps
M. N. Mavrogordato—Scott

350 cc Clubmen—8 laps
D. G. Chapman—Douglas

Side Car Race—5 laps
J. Beeton—Norton

350 cc—Racing Machines—8 laps
Geoff Duke—Norton

500 cc Racing Machines—8 laps
Geoff Duke—Norton

500 cc Clubmen—8 laps
B. Millman—BSA

350 cc Racing Machines—8 laps
(Second Race)
Les Graham—AJS

1000 cc Clubmen—8 laps
G. P. Douglas—Vincent

"The Corgi Championship"
Tyrell Smith—Corgi

Tourist Trophy Talk

ENTRIES for the three classes for this year's greatest race on earth were received in great numbers from all quarters of the globe with the result that once again a ballot has had to be taken to determine both reserves and the unlucky entrants. The riders, as per regulations, were grouped into four classes: A.—Overseas entrants having financial aid from the Auto-Cycle Union, or winners of the 1949 Senior or Junior Manx Grand Prix., B.—Manufacturers Teams limited to six machines in each class, C.—Entrants or Riders who have gained a T.T. Replica in any International T.T. Race since 1945, D.—The remaining entrants.

The Lightweight event, unlike the others, has the thrill of a massed start, therefore less entrants are allowed. As a matter of fact, twenty-five riders with six reserves is the limit. It would be hard for anyone to choose the winner with possibly fifteen different makes of machines coming to the grid, many of them "Specials." Dario Ambrosini, the Italian who has won many International events since the war on Guzzi and Benelli, should be well to the front. S. A. Sorenson from Denmark is an old stager, having entered his first T.T. in 1936, and will strive to coax his Excelsior to better the fifth spot he garnered last year. The perennial evergreen, Rolly Pike, will once more bring out his aged Rudge to battle with the "moderns," a second in 1948 may, with his vast lightweight experience plus a little luck, pull it off this time.

Italian Guzzis will be piloted by Tommy Wood, who at the age of thirty-five has had vast experience at home and overseas and Maurice Cann. In almost every lightweight event for some time Cann has wrung the red machine to some purpose, that of First Spot. The third of this marque may come to the line in the hands of Fergus Anderson who, like Tommy Wood, is a member of what we dub "The Continental Circus," meaning the riders who spend most of the season racing on the continent, generally with signal success.

The Junior will have a field of a hundred riders. These will be started at 10 second intervals and almost anything can happen. Freddy Frith will be missing following his retirement but among others of a like calibre will be Velo Fellows, Dave Whitworth, Reg Armstrong, Frank Fry, Charlie Salt and Bob Foster. But even so, I have a feeling that this is not to be a Velo year.

The modified Norton and A.J.S. machines of the Works' teams will, no doubt, provide the fireworks in the Senior. Daniell, Duke, Bell and Lockett of the former opposed to Graham, Frend, and Doran on the latter marque will provide a hum-dinger of a scrap. With neither giving quarter the race will probably be more a battle of wits than of machines. Les Graham will no doubt force the pace from the start and with higher octane fuel permitted this year the speeds should be higher. I will not even try to forcast the result of the cunning of these riders whom I believe to be the best in the world. Artie Bell, gifted with Irish determination and grit, opposed to Ted Frend of like temperament, Harold Daniell, whose cunning riding will be matched by that of Les Graham, and the equally matched devil-may-care Johnnie Lockett and Bill Doran should dish up a battle royal. This leaves us also the amazing young newcomer Geoff Duke on a Norton, whose rise to fame has been so rapid that it has bewildered many older hands.

The Senior field numbers seventy-five, and the Norton-A.J.S. duel of last year will be an even greater battle this time. Vincents will enter the fray with a trio of Grey Flash single cylinder machines jockeyed by George Brown, M. Barrington and C. Stevens. Italy is sending four-cylinder machines, three double ohc MV's, to be steered by Artesiani, Bertoni and Magi. Once again the "multi" versus "single" controversy will be heard. The "twins" will be represented by the Guzzis of Lorenzetti and Bob Foster, plus six or seven Triumphs led by Dave Whitworth. I make no forecast on this event except to say that it can be entirely open, though a multi has the advantage that it could perhaps reach home on one lung if need be and that is better than none at all!

HISTORY of FAMOUS BRITISH MOTORCYCLES

Norton

THE STORY of the Norton motorcycle concern and its famous products begins in 1898, when the late Mr. James L. Norton, who was one of the founder members of the Institute of Automobile Engineers, established a firm known as the Norton Manufacturing Company. The first motorcycle he produced was known as the Norton "Energette." It is still recalled as a pioneer of the motorcycle era, and it embodied many of the principles of design that are standardized throughout the industry today. From this original machine have evolved all the famous Nortons that have since made motorcycling history throughout the world.

In the early 1890's Mr. Norton introduced into motorcycle design the present type of low frame and rational riding position. Though this was very soon universally adopted, at its first appearance it was greeted with ridicule and the machine was nicknamed the "Ferret" because of its long, low build, as opposed to the usual high, upright "giraffe" type.

The late Mr. Norton was, in fact, the doyen of motorcycle designers, and is still held in the greatest respect by those who remember him. He died in 1924, his last public appearance being at a Civic Reception given by the Lord Mayor of Birmingham to the Norton riders who had won the Tourist Trophy Races that year.

Early racing Norton seen at Silverstone, reputedly won the 1926 Senior T.T., rider S. Woods

It is, of course, in the world of racing that the Norton marque has achieved its great fame. As long ago as 1902 Norton machines were creating new records and winning races of all kinds, and in 1907 a Norton machine won the Twin Cylinder class of the first Tourist Trophy Race by a margin of 33 minutes.

Norton Motors Ltd., have won more Tourist Trophy races than any other manufacturer—22 in all, a record of

(*Continued on Page 26*)

1950 T.T. REPORT

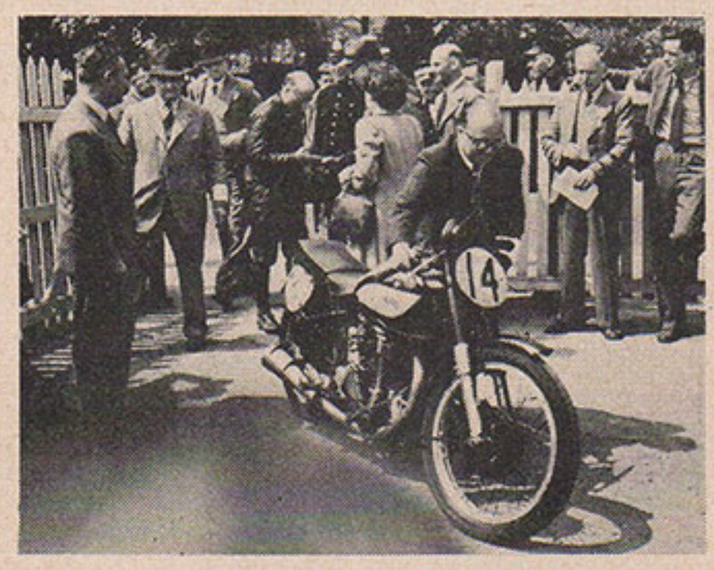
CYCLE's Bill Onslow Will Cover the Races Fully in Our Next Issue

THE NORTON STORY

(*Continued from Page 25*)

which any company might be proud. They still hold the lap record for the Senior T. T., set up by Harold Daniell in 1938 at a speed of 91 mph. Beside the Isle of Man T. T. races, they have a wonderful record of successes in Continental races. Nortons have won the Swiss Grand Prix 11 times and the Belgian Grand Prix 22 times, and on several occasions they have been victorious in the South African T. T., the Australian T. T., the Championship of Portugal and the principal Irish road races. At periods in their history Norton has held more World Speed Records than any other manufacturer. During 1949 a Norton team of Artie Bell, Geoff Duke and George Oliver secured no fewer than 21 new World's Records in the 350 cc, 500 cc and sidecar classes, all these being set on the Montlhery track, near Paris.

The present chairman of the company, Mr. C. A. Vandervell, was rather a successful rider in his younger days and has since become famous as the originator of the C.A.V. battery and the C.A.V. lighting set. The managing director is Mr. C. Gilbert Smith, who vigorously pursues the racing policy introduced by the late Mr. Norton—a policy which has been so successful that the "race bred" Nortons are known and esteemed



H. Daniell's 1949 Senior T.T. winning Norton after race. Daniell can be seen in background

throughout the world. Another famous name associated with the Norton racing successes is that of Joe Craig, Technical Director of the firm, who, from 1925 onward, has been responsible for the development of the wonderful series of racing machines which have made the Norton name supreme.

Nortons have also been fortunate in the riders they have chosen to pilot their machines in important events. Many famous names and reputations have been made on Nortons, including those of Stanley Woods, Alec Bennett, Tim Hunt, the late Jim Guthrie, Fred Frith, Harold Daniell, Artie Bell, George Oliver and, of course, Geoffrey Duke, the brilliant young rider who has recently been promoted to membership in the famous Norton racing team.

WE ARE PLEASED TO *Announce...*

. . . Motor Trend Publications is now distributing three of the TEMPLE PRESS LIMITED publications, MOTOR CYCLING, THE MOTOR and THE LIGHT CAR, and two of ILIFFE & SONS LTD. publications, THE MOTOR CYCLE and THE AUTOCAR.

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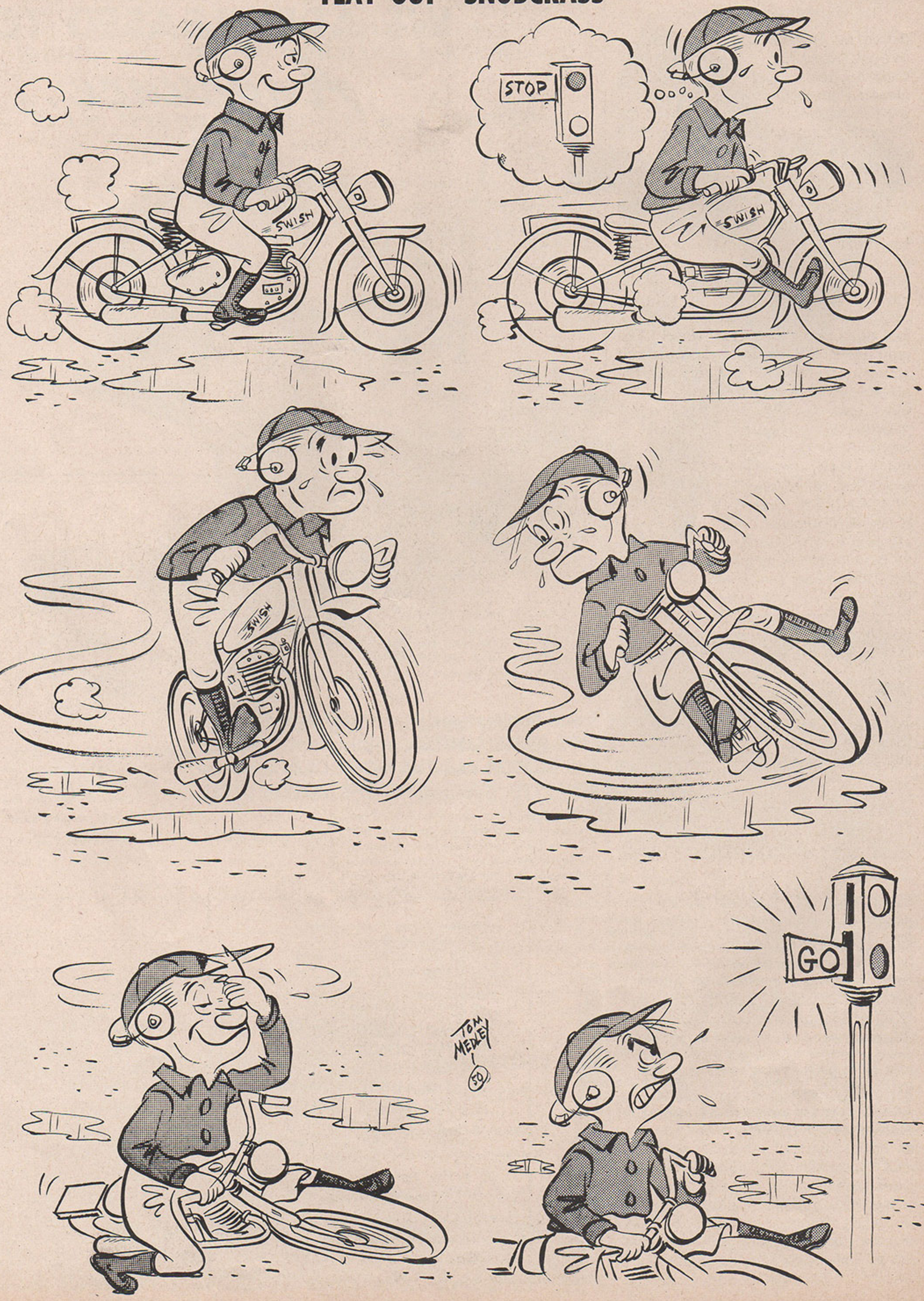
"SIGNALS OVER"

"FLAT OUT" SNODGRASS

BY MEDLEY



GERMAN BMW

(*Continued from Page 11*)

the engine housing. Roller rod bearings and ball mains run on a built-up crankshaft and the chain-driven ball bearing mounted camshaft is geared to drive a positive oil pump. The four-speed-ahead transmission is normally shifted by a ratchet-type foot pedal, but an auxiliary hand shift lever is there if you need your feet for other purposes.

The makeup between drive shaft and transmission consists of a highly flexible, shock-absorbing rubber coupling. The drive shaft itself ends in a universal joint at the rear wheel drive housing, which is also a light alloy casting. Spiral bevel ring and pinion gears do the final job of rotating the rear wheel. The typically BMW vertical telescopic coil spring rear suspension is a unit with the rear drive housing. In stock trim with a full tank the BMW twin weighs 408 pounds, will easily reach 87 mph and consumes about a gallon of gas in 62 miles. 24 bhp are pulled at 5800 rpm.

The 250 cc model has a great deal in common with its big, luxurious brother: the same shifting mechanism is used, the same V-form valve gear, the same shaft drive and, above all, the same airtight, super-clean engine design. However, this is the economy model and money has been saved for the customer by elimination of such de luxe features as rear springing, extra-comfort saddle, deep-section fenders. The 250 cc has a top speed of 60 mph, weighs 287 pounds with a full tank, gets 78 mpg along with 12 bhp at 5600 rpm. And there you have BMW production for 1951 . . . and available HERE in the U.S.

A CHAMPIONSHIP DATE TO REMEMBER!

SARATOGA — Hialeah — Churchill Downs—Santa Anita—Bay Meadows—famous names all, and all top spots in the turf classics of the nation. And now to Bay Meadows, for those who follow the iron ponies, comes the 20-Mile National Championship Race for one mile dirt track on June 25, 1950.

Sponsored by the San Francisco Motorcycle Club and aided by the unstintingly cooperation of William P. (genial Bill) Kyne, General Manager of the Bay Meadows Track, this event bids well to establish a new high mark in the sport of motorcycling in the West—and its acceptance by the general public.

Entry blanks are being furnished A.M.A. Referees in other districts; riders wishing blanks should contact the referee in their areas.

EUROPEAN NEWSLETTER

by Dino Lancia

THE EUROPEAN trend has taken firm root in the lightmotor class, and the transportation of the man in the street lucky enough to be on wheels runs from 50 cc scooters to a top of 125 cc in true motorcycles. Sure there are larger machines being built—right up to 500 cc, all of 30½ cu. in.—but most of these jobs are earmarked "for export only" and few fall into the hands of homefolks. Naturally this trend, enforced by the well-known economic hole postwar Europe finds itself in, is spurring designers on to ever new means of saving—saving on anything and everything: fuel consumption, building cost, weight, metal, while all the time driving the standards of performance, efficiency, and comfort higher. The "discovery" of the motorscooter in Europe has caused a whole new industry to spring up and the boys on the continent now can take their choice of a huge number of scooters, all of which are finished as perfectly and as eye-pleasingly as, say, the best English export bikes. Almost all de luxe continental scooters now carry spare tires, have all-round springing, are equipped to carry two passengers as comfortably as a big Yankee job with buddy seat. Scooters are fast becoming the poor man's sport machine.

Postwar production is booming,

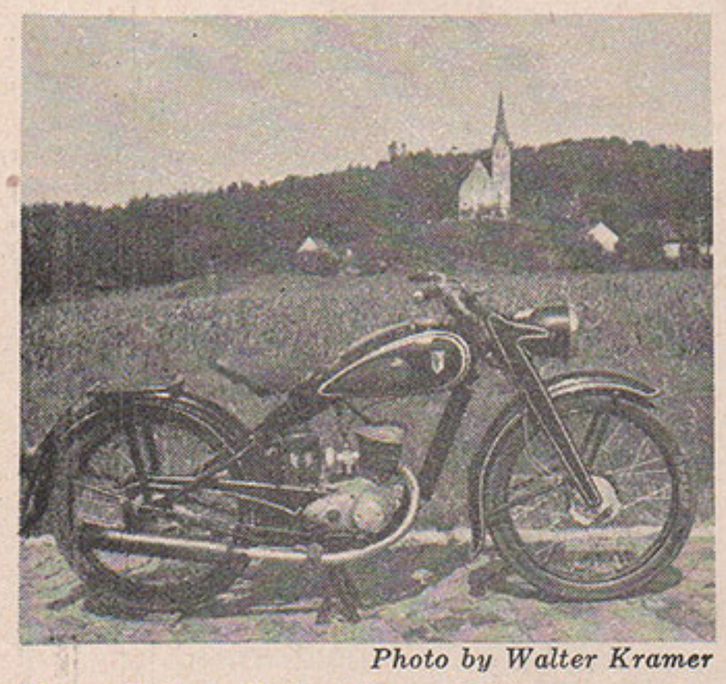
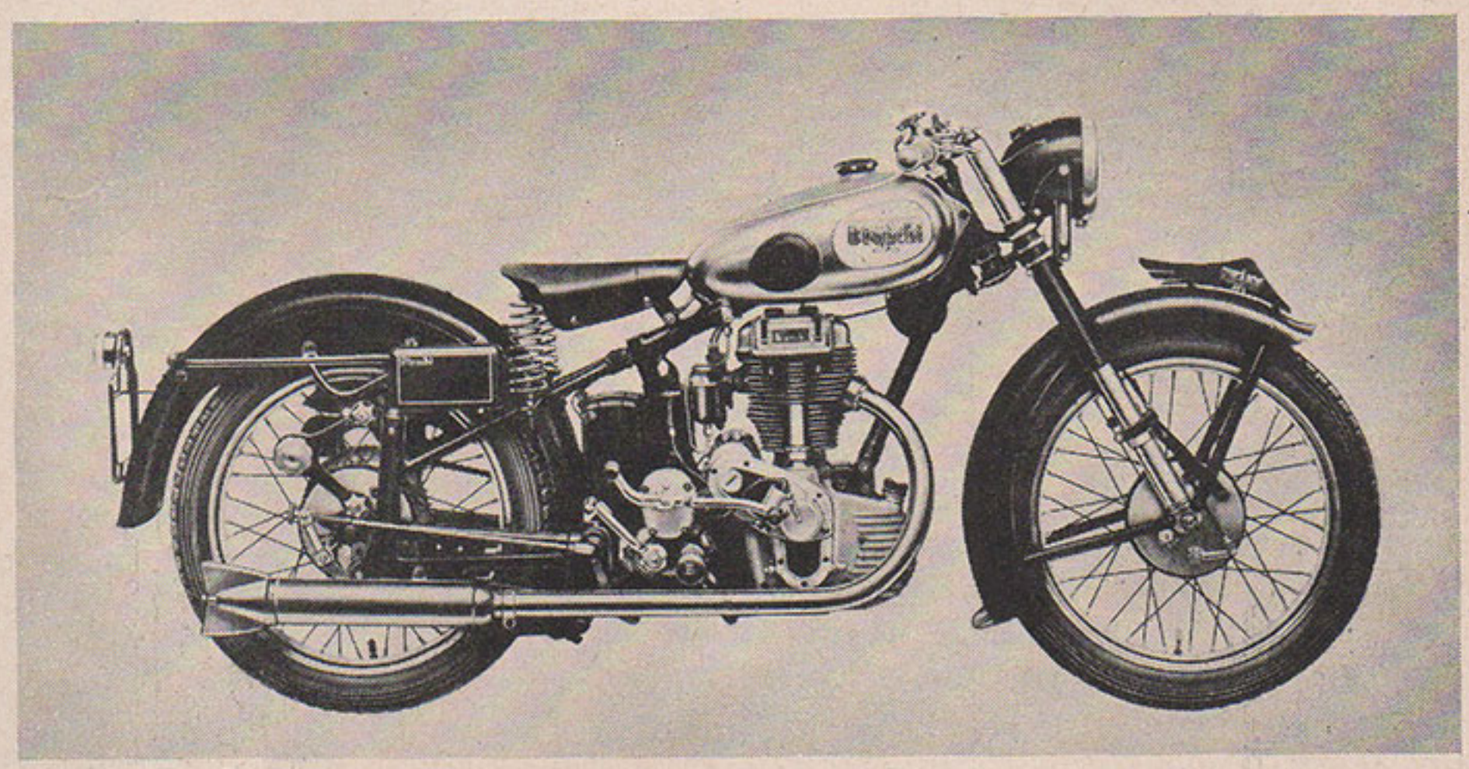


Photo by Walter Kramer

The efficient little 125 cc DKW two-stroke, called "The Little Wonder." Produced by Auto-Union, pre-war builders of the fabulous rear-engined Grand Prix racing car. The great Tazio Nuvolari won the last pre-war Grand Prix classic driving one of those 12 cylinder creations

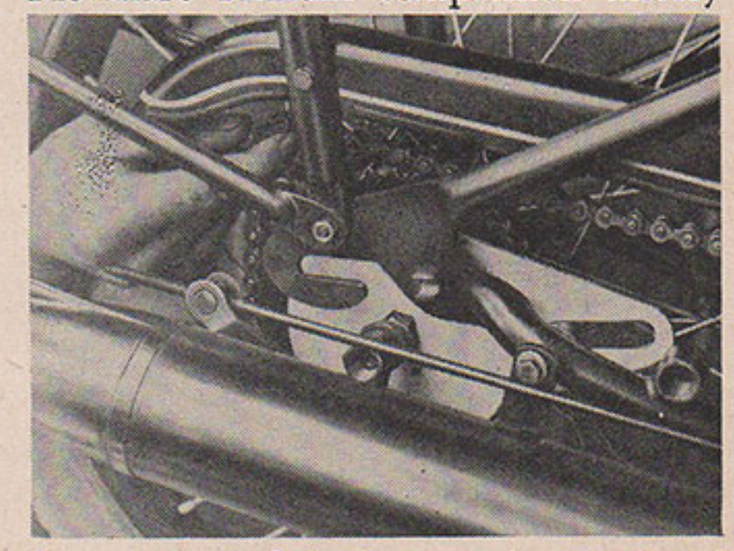


The sensational Bianchi 250 cc "Stelvio" model. This make has recently resumed production

which is not surprising; people need wheels, people can't afford cars, almost everybody settles for two wheels, and the cycling scene becomes brighter than ever in history. A quick, light survey of what the makers overseas are up to includes:

The Italians

IN ITALY: Lightbikes ranging from 60 to 125 cc numbered over thirty at the recent Milan motorcycle show—not counting scooters. (These are called "scooters" in Italy and France, "auto-roller" in Germany.) . . . GUZZI, one of the most legendary makes, is also one of the heaviest producers. The 1950 line starts with a 65 cc, 2 bhp, two-stroke 100 pounder, jumps to the "Airone" with 250 cc, 9½ bhp four-stroke ohv, weighing 313 pounds—and a higher-revving version of the same, pulling 13½ horses and good for 74 mph. Next in the Guzzi line is the traditional "Astore," which has changed little in the past 16 years. It's a four-stroke ohv job also, has 23 bhp, does over 85 mph. There are variations on these Guzzi models, plus the 250 cc overhead cam competition "Albatros." Except for the 60 cc microbike, all Guzzi machines are marked by their single, horizontal, fore-and-aft cylinder, external flywheel, and good springing all around. To round out the picture they produce a rugged and luxurious 150 cc scooter which uses a fourstroke ohv 6½ hp power unit, has good overall springing, carries spare tire. In case you're wondering what else this firm is doing with motorcycles the answer is "building trucks." Yes, they put out a very nice line of open and closed three wheelers, including a genuine dump truck! . . . GILERA is producing the only four-stroke 125 cc job in Italy. It's a very advanced machine, cleanly designed and a joy to look upon. It uses a 3 speed box, elastic suspension, interchangeable aluminum wheels. The Gilera 4 cyl. "Saturno," which just missed the world's championship in '49, is being developed . . . F. B. MONDIAL fourstroke and MILLER twostroke are outstanding in the 200 cc field, but are only for export. Mondial's brilliant competition history



Close-up view of simple rear axle mounting of the 125 cc post-war DKW. Features utmost simplicity, facilitates removal of the rear wheel

was refreshed last year when Nello Pagani rode one of their 125 cc ohv items to win the world's championship

Novafoto, Milan

Nello Pagani receiving the laurels of the victor in the 1949 Grand Prix de Suisse (Grand Prix of Switzerland) on his 125 cc F. B. Mondial

in that class . . . CM is another fine make and one of the first to enter the 250 cc range. The initials are those of Cavedagna Mario, who achieved the new model by mounting two of their 125 cc twostroke barrels on a single crankcase. This is the first vertical twin twostroke to be built in Italy, is supersmooth and super-light, should be successful . . . "Ghibli," made by SERTUM, is also a high-grade 250 cc job: its ohv single cylinder engine pulls 14 bhp . . . Scooters are all over the place—at least 15 different makes.

The Germans

IN GERMANY: ZUNDAPP went back into production with their 198 cc twostroke chain driven model. The masterpieces, the 500 cc shaft driven flat twins, have been revived for 1950. The typical Zundapp pressed steel frame is used as are dual pots, 4 speed box, overhead valves, superb springing all around . . . BMW, pioneers of shaft drive and opposed twin, began postwar activity with a revival of their beautiful 250 cc single in '48, have just resumed making the classic 500 cc twin. An American distributor has been appointed to import them into the States . . . DKW's only foray into the motorcycle field at present consists of a 123 cc twostroke. The idea behind it is clearly to give the customer every conceivable convenience and comfort, doing it all in the most scientifically economical way—like the Model T Ford or the dollar watch . . . NSU has been making motorbikes for a half-century, is the biggest newsmaker in the German cycle industry. They produce in huge numbers, spare no expense in letting the world know about their products. There are the 98 cc ohv fourstroke "Fox," covered in June's CYCLE, the 98 cc twostroke version called "Quick," plus a 125 cc twostroke and a 241 cc fourstroke. This is an ambitious program for present-day Germany, but that's not all; there's the NSU-LAMBRETTA, a really super-dooper scooter with the lively displacement of 123 cc, 4½ bhp, and a 3 speed box. Engines come from the Italian Lambretta factory, "body" and frame are pressed at the Volkswagen works, and NSU assembles and sells . . . Actually dozens of little factories are building bikes under different names and using different overall designs, powered by ILO and SACHS 98 cc and other 125 cc twostroke motors. There are many scooters on the market and lots of three wheelers, including trucks of up to 700 pounds capacity, using 200 cc engines.

The French

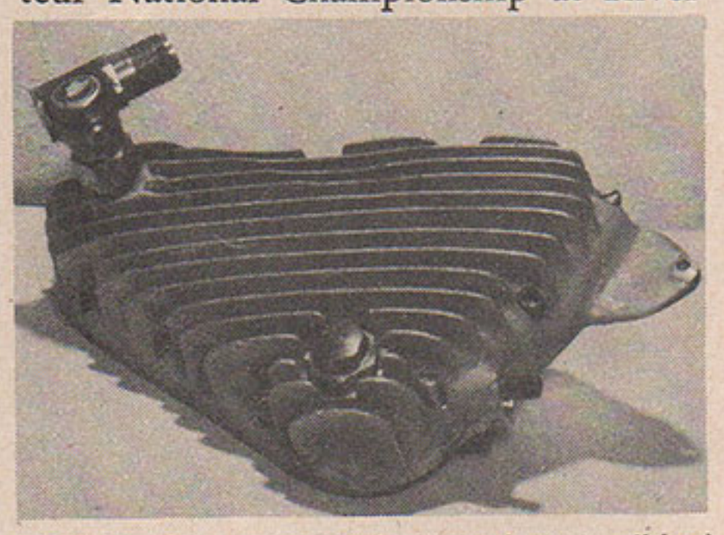
IN FRANCE: TERROT is one of the most important cycle manufacturing firms in Europe and many American GI's will remember the dependable bikes of this make used by the French Army. Not only do they produce winning racing motorcycles, their bicycles are competition winners too, and—they put out a line of super-sharp, streamlined baby buggies, the like of which could only be found in that land of fantastic coachbuilders. Terrot's line for 1950 consists of a twostroke 100 cc, a 125, a 350, and a 500 cc, all fourstroke. The 350's and 500's are being turned out at the rate of 80 a day, the 125 cc at 100 a day. This last develops 6 bhp, has 4 speeds, ohv, weighs 187 pounds and easily whisks two passengers along at 35 or 40 mph and gets about 100 mpg. It's this sort of machine that is really selling the man on the street on two wheels . . . SNECMA, the aircraft engine builders, produce one bike, the 125 cc twostroke Gnome-Rhone which has a 3-speed box and does 47 mph . . . RAVAT has been building two wheelers since 1898 and they too are on the 125 cc twostroke wagon . . . The great old name of MONET GOYON is in there with three models: 100, 125, and 250 cc. The big number is the only fourstroke with 4-speed box, the almost universal foot shift, weighs 242 pounds.

And that's some of the territory Overseas Newsletter will report on in detail every month—plus sport, books, sources for parts, and lots of other things, too.

Dealer Doings

LOU KAISER and Glen Newton, proprietors of British Cycle Service, National City, California, have recently marketed three new items of their own design and manufacture. Being specialists on Triumph bikes these new products will find a ready market in this country.

Kaiser has had over ten years experience with the popular Coventry-made vertical twins. He built and sponsored the Tiger 100 which Jimmy Phillips rode in 1948 to first place in the Amateur National Championship at River-



ABOVE—The newest Kaiser product, a ribbed cam case cover with integral tach drive

BELOW—Lewalloy Amal carburetor body and special piston, both designed for alcohol

side, California. This win first called attention to Phillips for his riding ability and track craftiness.

Other Kaiser products, which have proven popular with Triumph riders, are still being manufactured and distributed. Lou has found time to successfully operate his own motorcycle agency in addition to designing and distributing specialized products since V-J day. While no relationship exists, Lou Kaiser is somewhat doing for motorcycles what Henry J. Kaiser is doing for automobiles—giving the owners what they want—Satisfaction!

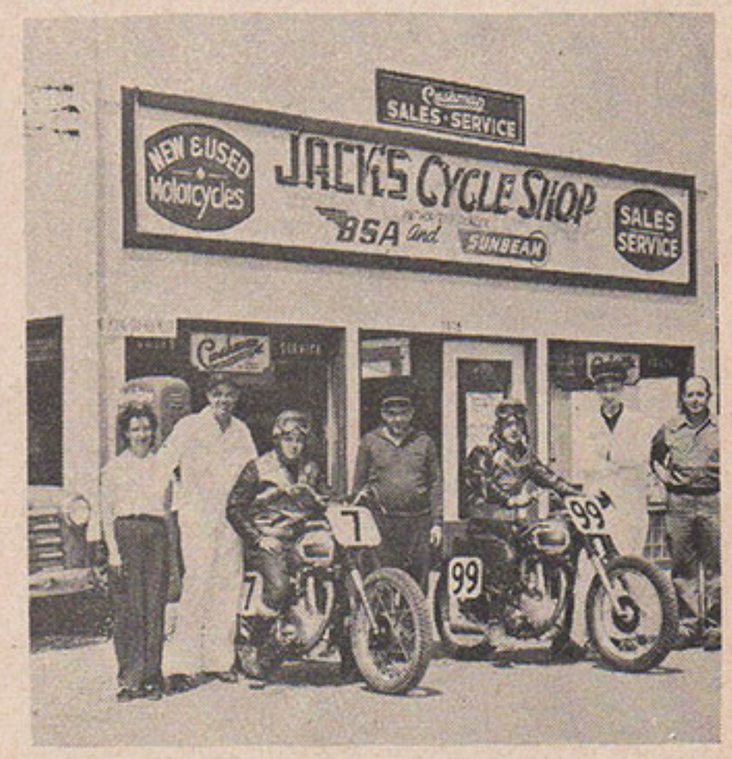
Vince to Bill—Martin

BILL MARTIN, Burbank, California, Indian dealer, recently announced the purchase of the Vincent L. Martin Co. The Martin Company has been Vincent HRD dealer since 1946.

This expansion helps to round out Bill Martin's motorcycle activities. Bill is no relation to Vincent but, being friendly competitors for several years, an equitable deal was made whereby Vincent could place a going business profitably in the lap of Bill, which resulted in Bill Martin now being able to sell and service Indian, Vincent, Norton, Royal Enfield, and other prominent lines being imported by the Indian Sales Corp.

Vince Martin has no immediate plans but to rest, fish and spend his loot. Bill Martin does have one immediate big plan, to sell enough motorcycles that his chief shop man, Tex Luce, will be kept busy just draining oil out of the customers' machines at the 500-mile service check-up.

Jack Hocker's the Name



In a short five years Jack Hocker, a motorcycle rider for over twenty years, has established one of the most progressive cycle shops in the country. Hocker's shop is in Vallejo, California, near the Mare Island Navy Yard. He wholesales John Bull tires, K.L.G. spark plugs, Bowden carburetors and controls, Hepolite pistons, retails BSA and Sunbeam machines. Jack is standing between his wife and George Cooper

Motorcycling in the Encyclopedia Britannica

SIMPLY as a matter of interest to learn what was being written about motorcycles 20 years ago we recently visited a second-hand book-store. A full set of Encyclopedias Britannica, Fourteenth Edition, were for sale. Volume 15 proved to be the one covering motorcycles.

The subject was handled by three contributors. two of whom were Geoffrey Spence Davison and William S. Harley. Upon observing these two names we felt that we were in the company of very old friends.

Geoffrey Davison is still a very active man in motorcycling. He won the 1922 Isle of Man Lightweight T.T. race riding a 250 c.c. Levis, in addition to more than a score of road race victories on the Continent in the early '20's. Today he is the editor and publisher of a half dozen books on motorcycling. Each year he also edits and publishes the "T.T. Special," a tabloid newspaper about which the subject matter is very obvious.

The late Bill Harley was one of the three founders of the Harley-Davidson Motor Co. Bill supplied much to the technical side of Harley-Davidson machines for many years. In the great days of Dodge City, Chicago 300 milers, the board track era, and the never-to-be-forgotten Syracuse races, Bill Harley was the genius that designed the legendary Harley 8-valve jobs that, under the tender care of Bill Ottoway's preparation, produced wins by the score all over the country. Bill Harley was a great designer.

Indian "Warrior" Reduced in Price

IN A special bulletin to its dealer organization on April 27, the Indian Sales Corporation announced sizable price reductions of $50.00 for all the six Indian Warrior models. Basis for this reduction was stated as due to economies in operation and greater efficiency throughout the manufacturing, administrative and selling divisions.

The new reductions bring the F.O.B. price for the standard Warrior down to $675 and down to $700 for the spring frame equipped model. Sport and De Luxe accessory equipment and special chrome and high polished finish continues to be available in specially priced "kit" packages, for riders who enjoy having this extra equipment.

LETTERS TO THE EDITOR

Sirs:

We received our copy of Vol. 1 No. 1, and my pardner, my son, and I, think that it's very good. If your subsequent issues are anywhere near as good, you are OK. I especially found the photo coverage of the Daytona races excellent.

I have been in the motorcycle business since 1914, and have seen many makes of motorcycles in that time. Also quite a few motorcycle magazines. In the old days Motorcycling, and Motorcycle Illustrated were good papers and covered the racing which was mighty popular in those days. I don't know why these failed, but I think it was because they no longer were interesting. They were too anxious to cater to the advertising factories, and a description of a new model was only a rehash of the factories own prospectus, and therefore contained no critical appraisal. Therefore, little was done to improve the American product to bring it up anywhere near the automobile standard.

Also, too many of them filled their pages with the bickering of certain factions which really interested only a minority, and finally they contained little of real interest to a motorcycle rider. The pages were filled with 'Club News hogwash,' etc.

In fact, for years I never bothered to subscribe to any of them. It's refreshing to find one that reflects the real interest (and a healthy one) of the motorcycle rider to know what is inside of his motor and why it ticks, and build up an interest in mechanical perfection which, I am sorry to say, the American product lacks.

I think your editorial was correct in blaming one of the causes of lack of motorcycle sales on the American standard of living, (and wealth). Our people have enough money to own a car, with its comfort and dependability. When the average young man's income is such that he can afford both a car and motorcycle, then we will see an increase in sales. In the meantime, the motorcycle must be glamourized and its mechanical condition improved considerably to interest the average man today. Perhaps it's SPORT appeal. This may be the reason motorcycles enjoy their immense popularity in England.

Frederic Bootz
Des Moines, Iowa

(Mr. Bootz, being a man of long experience, has comments worth much consideration—ED.)

AUGUST ISSUE OF *CYCLE*

1950 "Greenhorn" Report

CYCLE'S special correspondent, Al Long, will report the full 2-day story of the 1950 "Greenhorn" event.

• • •

Testing the BSA Twin

Officer H. Filker, assisted photographically by Tom Medley, reports on road-testing the 650 cc BSA "Golden Flash."

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Manufactured by Riedel Motor Corporation, in a modern, post-war factory at Immenstadt, Germany (called "Imme" R-100), the Bee-100 features airplane-type wheel suspension with interchangeability of wheels. Although a lightweight of only 125 pounds, the amazing patented rear-wheel springing creates comfort unsurpassed in motorcycle riding anywhere. The Bee-100 features a unique, streamlined power-plant of unit-construction gear transmission and 99 C.C. engine delivering 4½ h.p. giving a favorable power to weight ratio with surprising performance and a top speed approximately 50 m.p.h.

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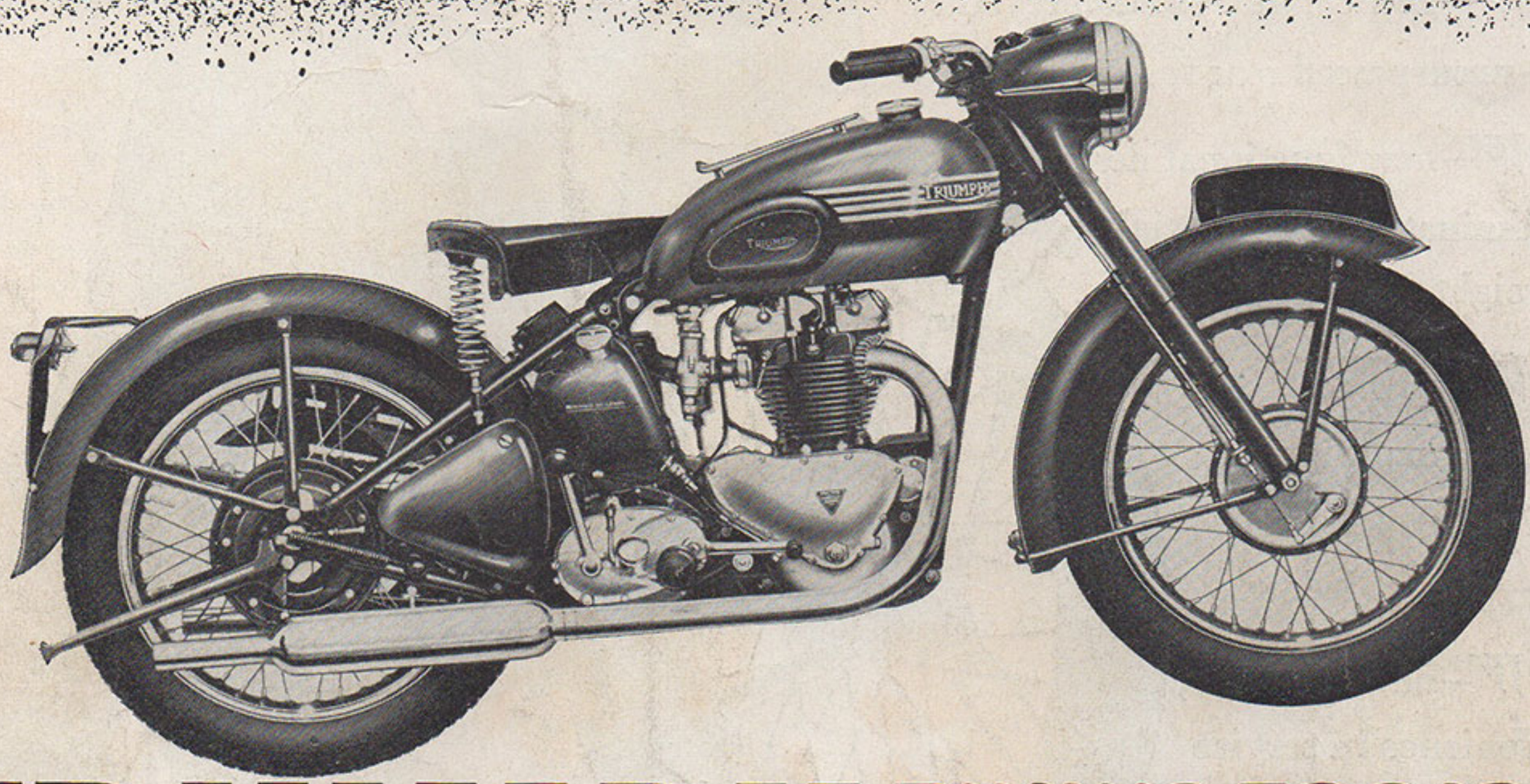

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