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APRIL 1956

35c

"World's Largest Monthly Motorcycle Circulation"

INDIAN
New Models

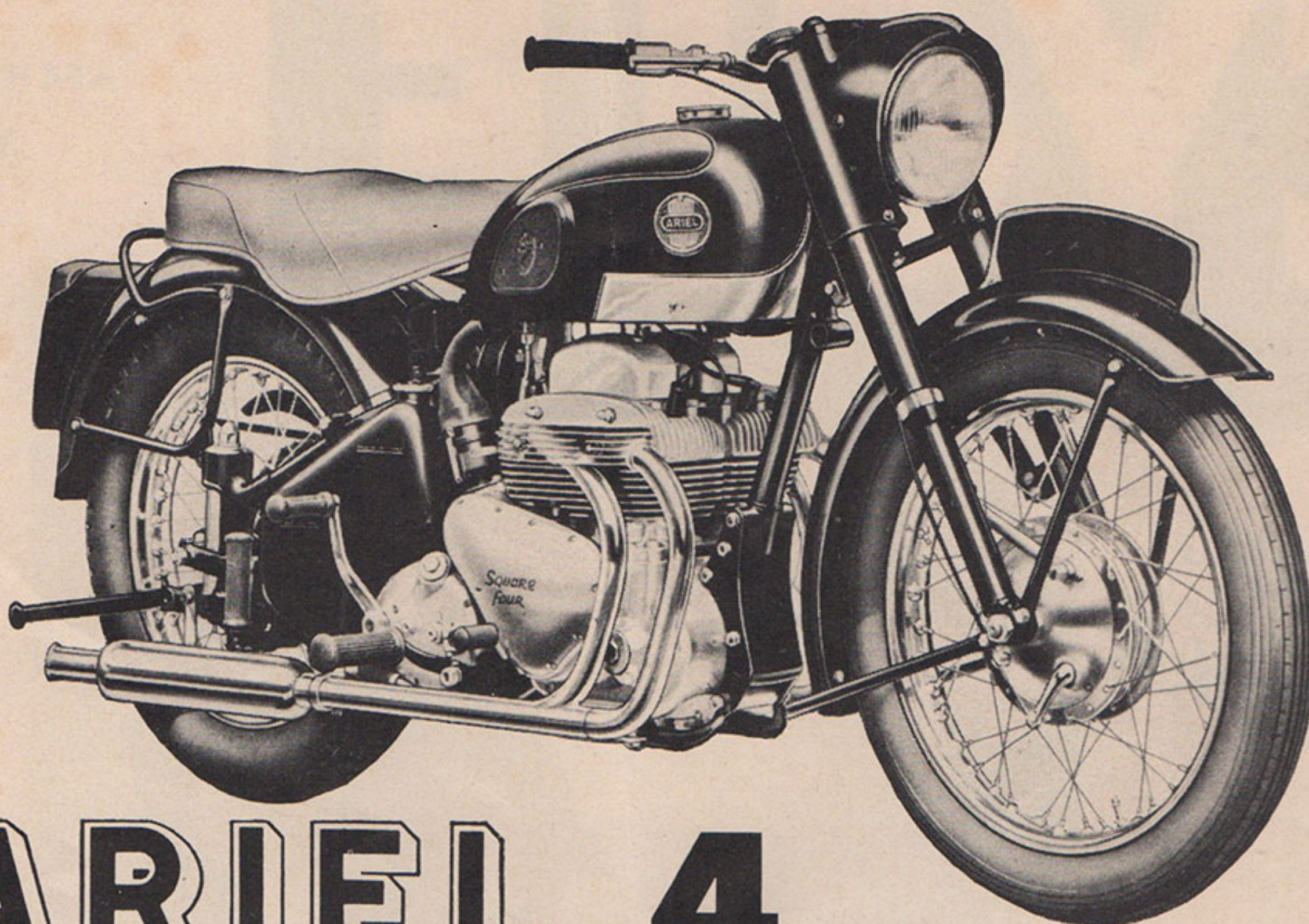
San Diego
Moto-Cross

THIS IS
A 2-Stroke?

The Grand Tour



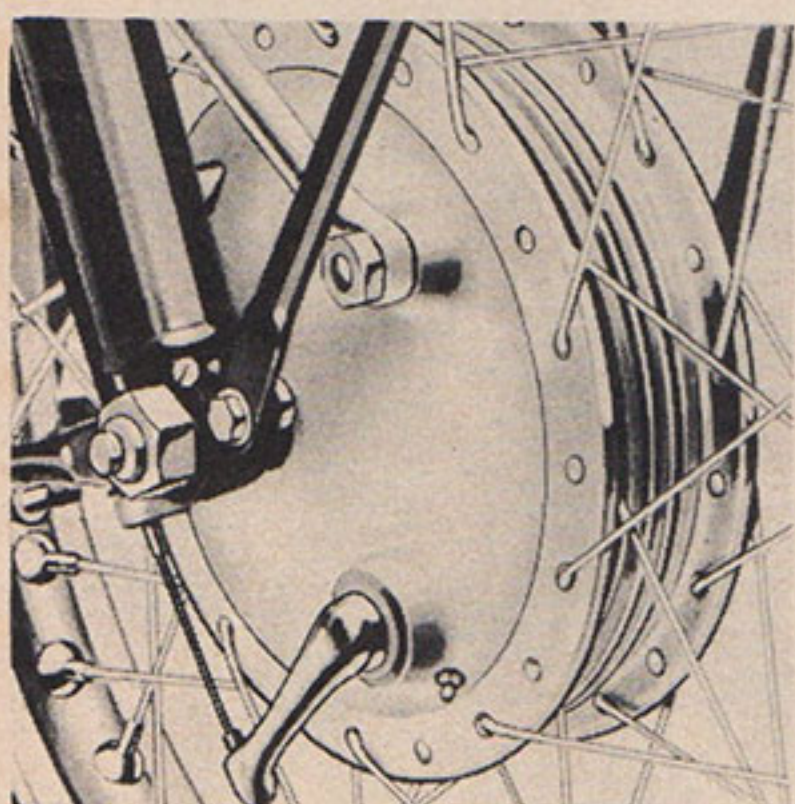
**Harley-Davidson
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Here's the new 1956 Ariel "Square Four" — the world's finest multi-cylinder motorcycle! Big 61 cubic inch engine packed with PUNCH — flexible POWER capable of 100 m.p.h.—plus the ability to whisper along at 10 m.p.h. in top gear—smashing POWER that rockets you ahead in traffic—emergency POWER for safe, quick passing—POWER you must experience to appreciate!

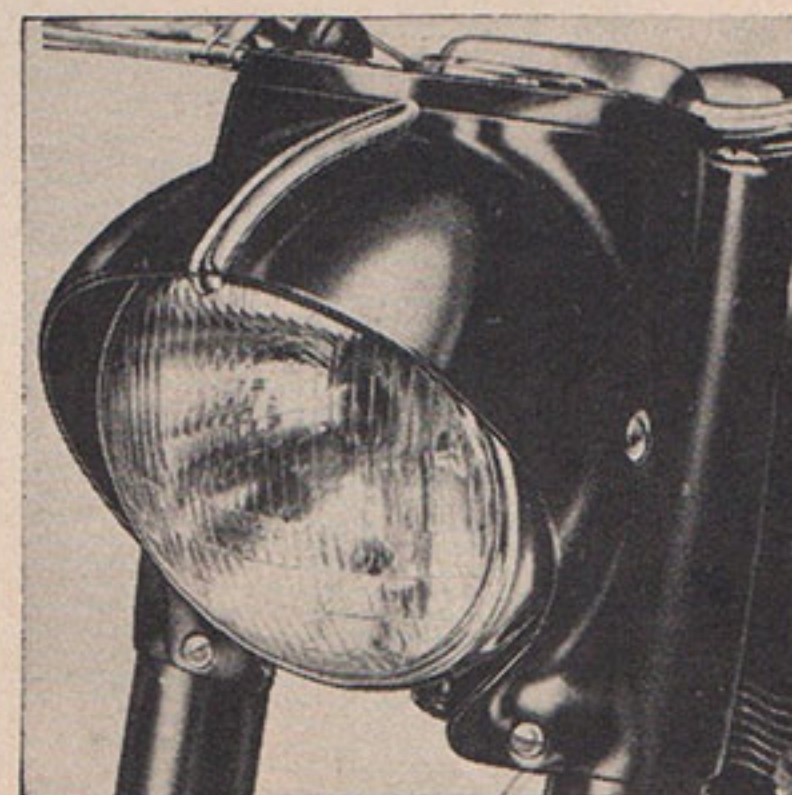


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1956 FEATURES

The exciting, new 1956 Ariel "Square Four" features the new, full width alloy front hub with centrally positioned brake, new modernistic headlamp cowl, new large capacity oil tank. Finished in gleaming black baked enamel with chrome tank panels, chrome wheel rims and many other chrome plated or highly polished alloy parts, the "Square Four" is a distinctive model for the motorcyclist who wants the best.

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In the East

BSA

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"World's Largest Monthly Motorcycle Circulation"

CYCLE is the only motorcycle magazine officially audited by ABC—The Audit Bureau of Circulation—an organization of impartial circulation experts. It is the advertiser's assurance of accurate circulation figures on CYCLE Magazine.



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Beautiful Rae Kisseloff of Glendale, Calif. adorns our cover astride a BMW. Photo by Rolf Lange. P.S. Fellows, she's single and the sister of John Bolotin, former member of the Hilltoppers M/C.

The Publisher's Column

New Members of Cycle Staff

We take pleasure in announcing the appointment of Gib Black as Editor of CYCLE. Gib started riding motorcycles in 1929 when he lived in Michigan. He continues to be an enthusiast and a daily rider. He soloed his first airplane in 1930 and then became an outstanding amateur boxer and Golden Gloves champion. He then joined the Air Corps and boxed professionally for six years, during which time he fought three World's Champions.

He started in the Service as a mechanic and at the outbreak of World War II, was commissioned and flew B-29s in the Pacific. After the war he flew B-36s, and also was on the staff of General Curtis LeMay, Commander Strategic Air Command. He was last stationed at Carswell Air Force Base, Ft. Worth Texas. After 22 years of service he retired as a Major.

Gib has a wide technical experience, having received Army instruction on the care of automotive vehicles, motorcycles, airplane engines, aircraft, and in photography. He is an ardent motorcyclist, having owned 25 machines of various makes in the past several years. Since he has been in close touch with every phase of the motorcycle industry, we feel that Gib will do a good job in his new position.

To the post of assistant editor we have appointed Rolf Lange. Rolf is a graduate of the University of Munich (Germany) in journalism and photography. Although still a young man, he has owned six motorcycles and, like most Germans, he is an enthusiastic advocate of motorcycles.

Two years ago, Rolf, together with his father, Eitel Lange, a widely known German journalist, rode a motorcycle and sidecar around the world. They published a book in German, which has had a good sale in Europe. This father and son team recently completed a second round-the-world tour, using a Porsche sports car, and will soon complete the book on this trip. Both Lange books will be published in English this spring by Floyd Clymer Publications.

Rolf speaks English as though he had lived in the United States all his life and, with his enthusiasm for motorcycles of all kinds, we feel sure that he will be a valued addition to the staff of CYCLE.

To our former editor, Don Brown, we wish every success in his future efforts, which includes free lance work. Don has served us well. His enthusiasm for motorcycling is contagious and he is a real credit to the sport—Good Luck, Don!



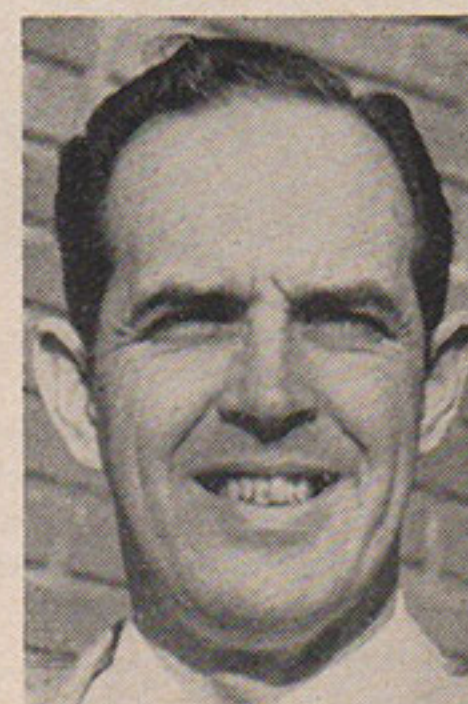
Editor, Gib Black



Ass't Editor, Rolf Lange



Manag. Editor, Evan Aiken



Adv. Mgr. Don Youngman

Floyd Clymer

DEADLINE DATA

late news at presstime

SAFETY HELMET PAYS OFF

Thanks to his newly-issued safety helmet, Motorcycle Officer Harley Lassiter, 25, last night escaped serious head injury in a collision at 27th Street and Central Avenue, Los Angeles, Calif. The helmet was dented and Lassiter was knocked unconscious when he was thrown into the side of an automobile driven by Emmett Woodard, 44, of 10335 Juniper street, Los Angeles. Lassiter, however suffered a broken ankle. The accident occurred when Lassiter and his partner, Motorcycle Officer C. L. Lilywhite were pursuing two speeding automobiles on Central Avenue.

GLENN JORDAN—TOP NOVICE OF 1955

During the 1955 season, with interest centering on the Expert class in National Championship events, perhaps not all motorcycle racing fans were aware of the fact that a bright new name in racing was emerging. We refer to Glenn Jordan Jr., Columbus, Ohio, who wound up the season with no less than 202 points in National point standings. During the season, Glenn had taken part in 31 race meets in 7 States. To run up his total of points, he had to win the majority of events entered.

Another honor won by Glenn in 1955 was the coveted Ohio "Hall of Fame" award, bestowed on Ohio's leading rider in each class by the Columbus Star, one of the nation's very few newspapers which devotes regular space to motorcycle happenings.

Glenn, who rides BSA, is the son of another famous dirt track rider in the Ohio section, Glenn Jordan Sr. who rode on the dirt tracks during the 30s. Glenn's riding style is somewhat reminiscent of that of Dick Klamfoth, and this is understandable

when it is known that Klamfoth is Glenn's tutor. Jordan started riding on one of Klamfoth's old motors but during the past season has been boosting his successes with a brand new BSA "Gold Star" single.

A graduate of West High School in Columbus Ohio, Glenn is employed in the mail room of the Columbus Star.

Glenn started riding a motorcycle in June of 1953, and entered the famous Legion-Arrow Columbus, Ohio race meet in the Fall of that year. In 1954, a good start was marred by an accident which put him on the sidelines for the latter part of the season.

He came back strong in 1955, and quickly became known as the man to best in any race. This record was maintained all season to such good effect that he emerged as the leading Novice rider of the nation for 1955. He will, of course, go into the new Class B in 1956, and therefore is the last "Novice" rider to win the point standing race in the class.

An interview with Glenn produced the statement that the race he enjoyed best during the past year was one at the high banked New Bremen Ohio 1/2 mile track. He set a record for the lap at 24.09 seconds and won both his heat and the Novice final that day.

Glenn remains modest and willing to learn. With youth and enthusiasm on his side, the future looks bright for this newest National racing star.

AMA Bulletin

1. This past year, the AMA issued approximately 365 sanctions for Flat track, short track, TT, hillclimbing and road racing. The following referees were kept the busiest:

Cliff Onan	S. Calif. Refereed	49	Meets
George Alcalá	N. Calif.	38	"



Glenn Jordan, Top Novice

BSA PHOTO

Joe Gee	S. Ohio	"	24	"
L. W. Patrick	Florida	"	22	"
George Elliott	N. Illinois	"	18	"
Robert Finn	New England	"	18	"
J. T. Miles	C. Illinois	"	17	"
John Schmitz	Wisconsin	"	17	"
R. E. Gardner	Kansas	"	15	"
George Mosser	W. Penna.	"	15	"
Dan Van Vleet	Michigan	"	15	"

2. SPECIAL NOTICE:

An asterisk (*) after a rider's name on the 1956 Competition license denotes that the rider is listed in the Riders Supplement for 1956 or has been listed in past Supplements.

3. Class B riders for 1956 will display yellow plates with black number and letters on their machines. The yellow will be comparable to Dupon commercial yellow—#93-6808.

4. In 1955 the AMA notified 33 Class B Enduro riders that they had scored the required 100 points while competing in runs, and were therefore advanced to Class A in all future runs. The names of those riders notified were also published in the monthly American Motorcycling magazine.

5. Referee kits for 1956 will not be mailed to District referees. Referees who are in need of material shall make their requests, designating their requirements.

6. Ed Gentner, District Referee, was the first to notify AMA of his plans to attend the Daytona events in March.

7. First 1956 competition license was issued to Ernest Mallinger a Class B rider from Miami Springs, Florida.

First Daytona entry was received from Hank Bohnwagner, a listed Class B rider from Detroit, Michigan. Earl Widman, a Class A rider from St. Louis, Missouri, was the first entry for the 200 miler.

8. The following safety helmets are on the AMA approved list for Class C competition or events where prize money is paid or a competition license required to compete.

Clymer	Floyd Clymer
Bell "500"	Frank Hethcox
Cromwell	Beck Distrib. Corp.
Geno "M 700"	Triumph Corp.
McHal	McHal Enterprises
Seagrave	Beck Distrib. Corp.
Shoc Shell	John Lohrenz

9. The 1956 Rule book and Rider's Supplement will be available March 1st, price 25c each.

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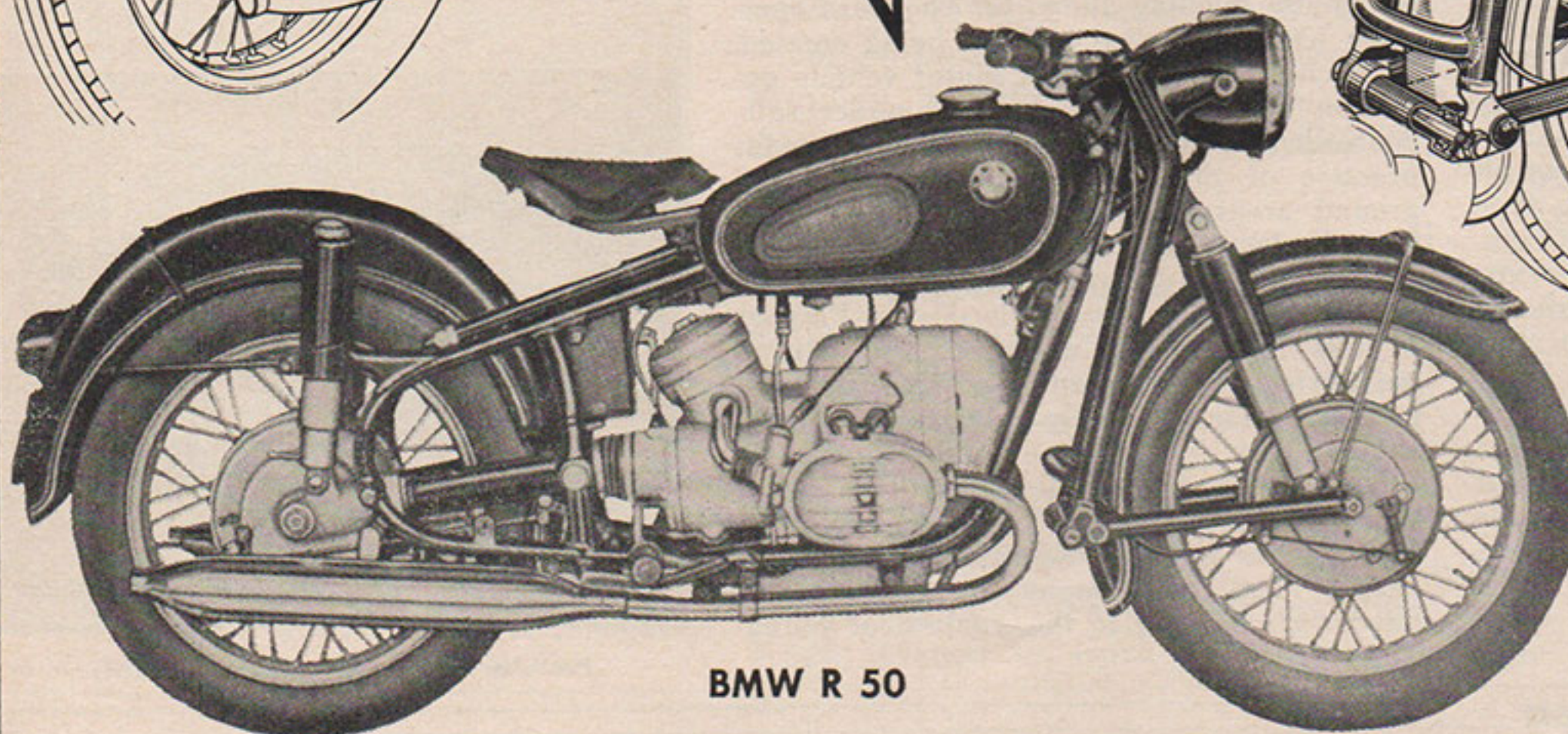
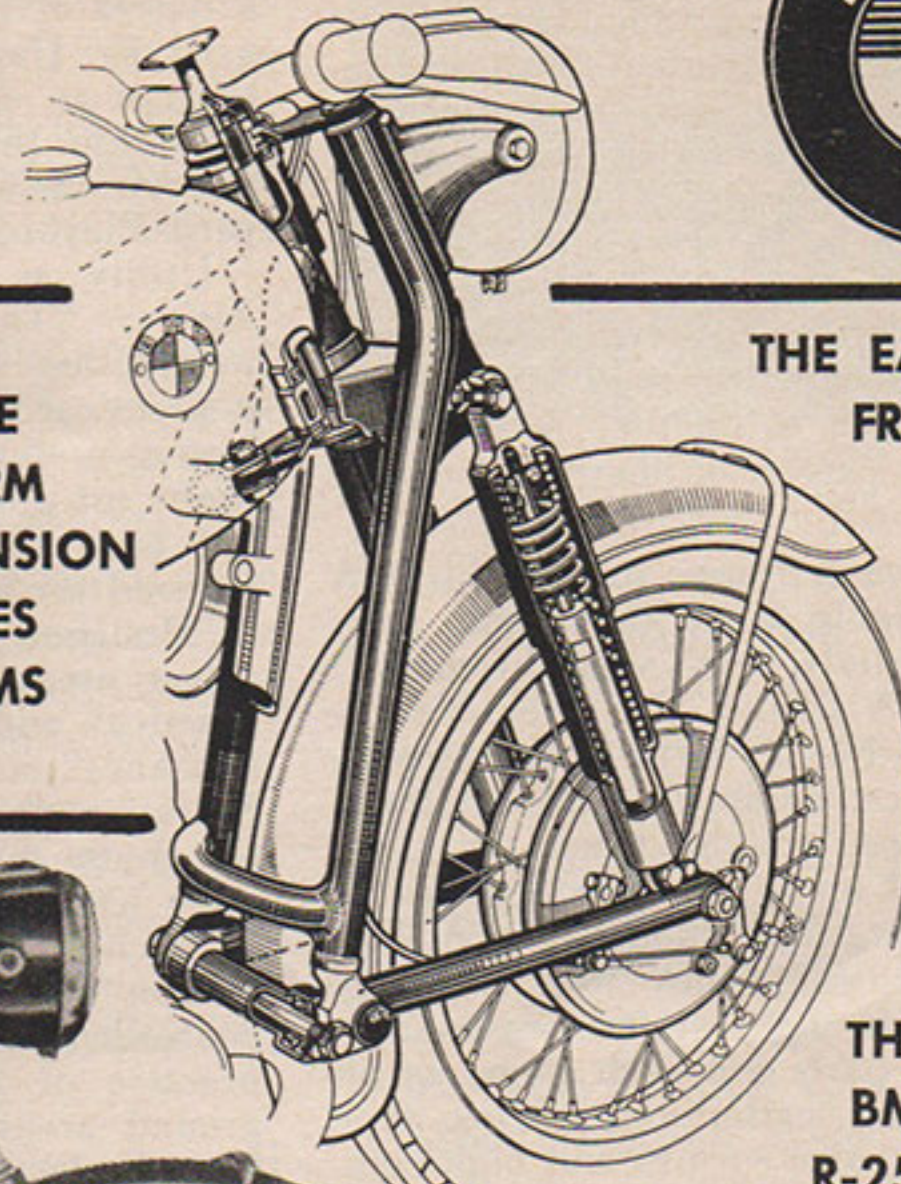
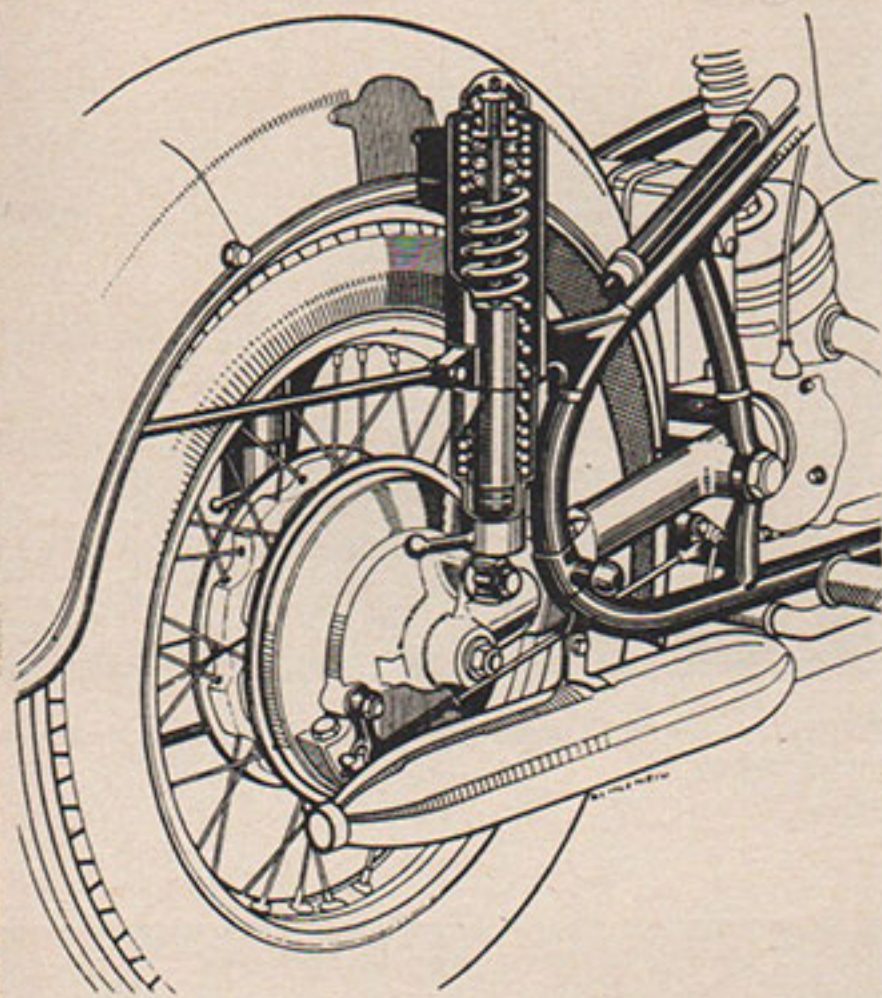
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BMW R 50

YOUNG EXPERT



19-YEAR-OLD BRAD ANDRES SETS RECORD AT 200-MILE NATIONAL CHAMPIONSHIP RACE AT DAYTONA BEACH. YOUNGEST RIDER TO WIN NATIONAL CHAMPIONSHIP.

Dad Andres congratulates son Brad for setting a new record of 94.57 m.p.h. for the big National 200-Miler.

That headline is typical of the many that have followed the brilliant career of young Brad Andres. Yet for all his young years, Brad is an "oldster" when it comes to racing—had his first motorcycle when he was five. And no wonder—Leonard, his dad, was a great competitor himself for over ten years—still coaches and acts as pitman for all Brad's races.

The big National 200-Miler demands uncommon stamina from rider and bike. Reason enough why champions like Brad Andres depend on Duckworth Cycle Chains to match the grueling, power-straining drive of a big race. Why not follow Brad's example? For racing or pleasure riding, pick the best and most dependable—Duckworth® Cycle Chains. At dealers everywhere.



Brad Andres, No. 21, leads the pack out of a turn during the 200-Mile National Championship Race.

DUCKWORTH
CYCLE CHAIN

A product of CHAIN Belt Company,
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All About BSA's "Basic Racer"

Consider the problem of the beginner in dirt track motorcycling racing. He is faced with the problem of obtaining a fast and reliable mount—one that can be obtained at reasonable cost, and for which there exists a moderately priced supply of spare parts—those parts which by the very nature of racing are constantly "consumed". He would, in many instances, prefer to have a motorcycle which could be restored to road form should he desire to switch to another mount later on in his racing career, or should he decide to quit racing.

With this young man in mind, BSA is making available what they term their "basic racer". Briefly, here's what this means: Through his BSA Dealer, the rider can obtain a BSA "500 Flash" Twin at an extremely attractive price, equipped with cataloged BSA speed parts which, when installed, bring this model up to the specifications of the BSA "Shooting Star" model—the A.M.A. approved model which has won so many racing events over the past few seasons. Included in these parts are such items as an Amal T.T. racing carburetor, racing type camshaft, racing valve springs and high compression pistons, rigid rear frame struts, all rear fender, straight through exhaust system, and other items designed to give the already high performing BSA 500 Twin even more "urge". Performance is also increased by removal of equipment not used in racing such as lighting set, battery, dual seat, road fenders, etc. When he places his order, he may, if desired, purchase the road equipment. Riders interested in the BSA "Basic Racer" should contact their BSA Dealer for full information.

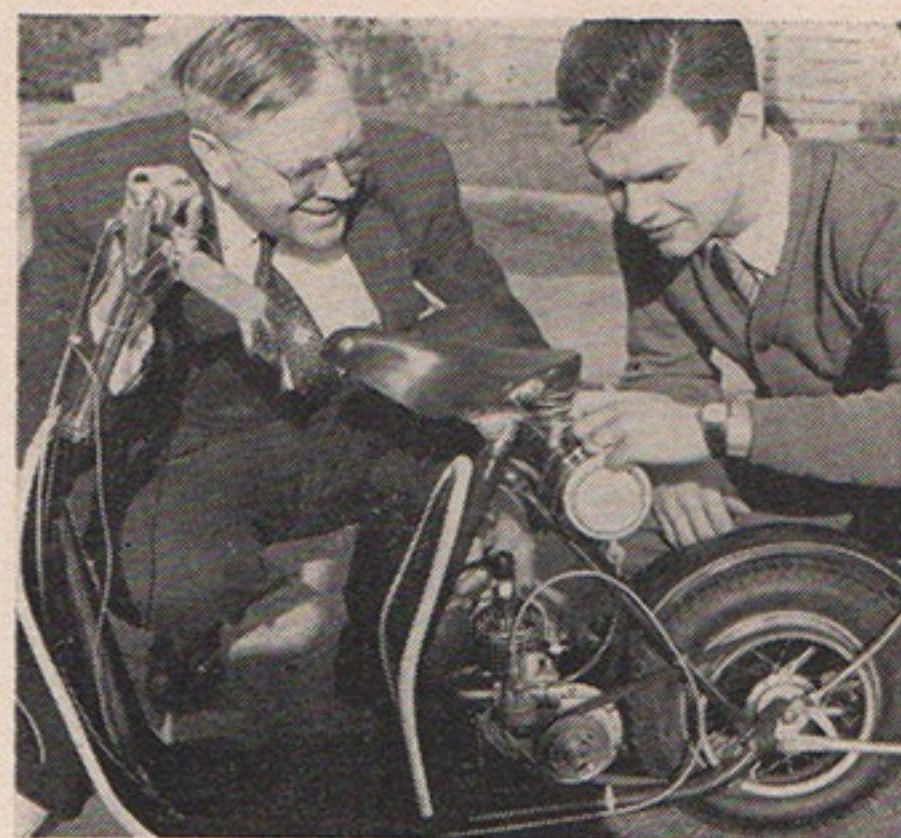
The "Play Boy"

"Cute as a bug's ear and more fun than a barrel of monkeys" were the appellations used by Hap Alzina, U.S. motorcycle distributor in describing the newest of the entries into the motor scooter field with his announcement of the newly imported Backyard Playboy.

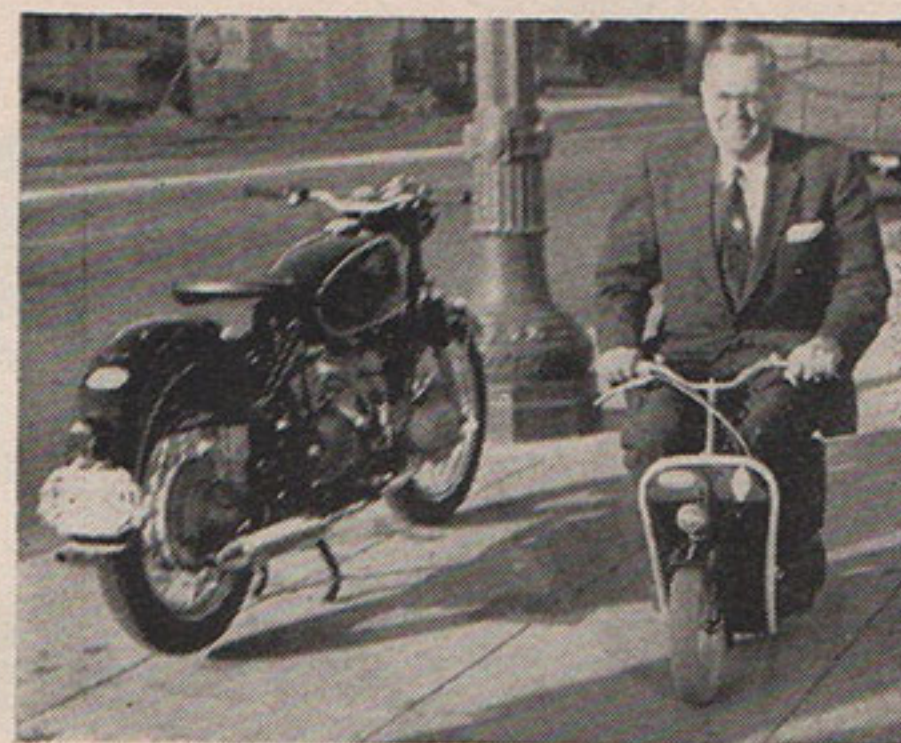
Utility as well as fun was stressed by Alzina. "The Playboy's extremely light weight, less than an airline suitcase, makes it practical for personal aircraft and yachtsmen as well as being well within the weight limits for Junior. The rugged welded frame has been tested with adults and is amply stressed for load factors."

"Designed for Junior's use in quiet suburban areas the Playboy has proved both practical and instructive. The modest performance and short turning radius permits operation in restricted areas and the effective engine muffling allows for backyard operation without a noise problem being created. It teaches the elements of motor vehicle operation and motor maintenance under safe, controlled conditions. Junior drill teams for practice of drill team maneuvers in playground areas are being formed in a number of places and the skill of the "under-ten" group has proven truly amazing."

Seven-year-olds have "soloed" the Playboy in less than fifteen minutes. The natural twist-grip throttle and automatic-release footclutch that instantly releases the clutch if the foot is raised or dabbed on the ground makes for complete safety in operation. The low center of gravity, less than eight inches and the modest 42 pounds gross weight, less than many bicycles, permit handling ease even in the smallest of youngsters.



Publisher Clymer and Ass't Editor Lange examine the Playboy.



Publisher Floyd Clymer riding Playboy.

296,836

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Boots Curtis, BSA Field Representative.

"All service parts for maintenance are instantly available", Alzina further stated. "We are now in process of setting up franchised agencies for purposes of local service and dealer inquiries will be welcomed." The little "Playboy" is expected to make quite an impact on the market of small, scooter-type transportation. The price is especially attractive and the quality of the merchandise is above average.

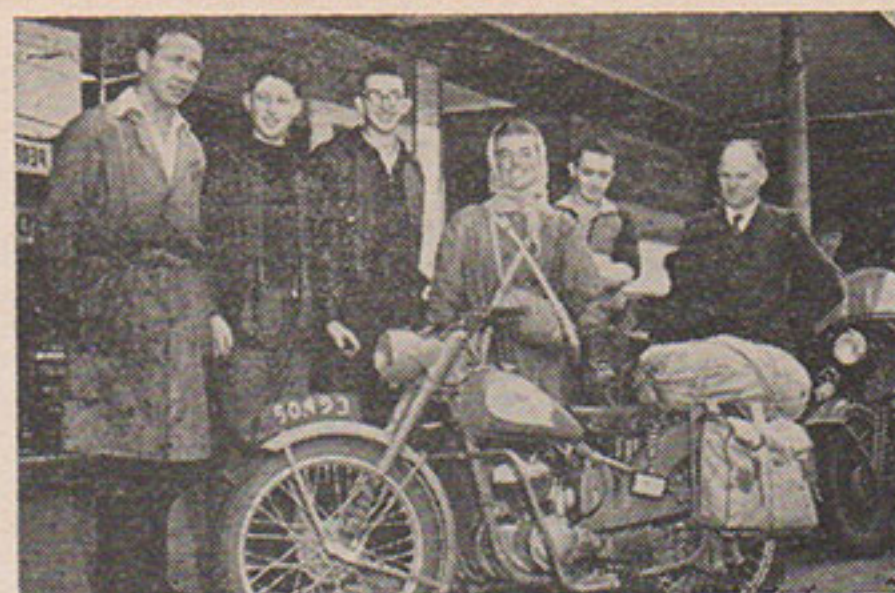
15,000 Lonely Miles

Miss Joy McKean, a 36-year-old New Zealand nurse, left Sydney last August on a 150 c.c. BSA Bantam Major, with the intention of riding solo to England. To date she has covered 15,000 miles at a total cost of \$300.

Sleeping in the open and cooking her own meals, Miss McKean first crossed the wild Australian outback on her way to Perth. When she reached the Western Australian capital she had already covered 5,500 miles over some of the continent's worst and loneliest roads. She caught a boat to Colombo and added a further 6,000 miles in touring Ceylon and India. After shipping the motor cycle from Bombay to Beira, she rode south through Rhodesia and Durban to Cape Town.

Her tiny machine had then covered 15,380 miles and had consumed 96½ gallons of petrol—an average of 158 m.p.g. Miss McKean's total expenses, including the cost of shipping, petrol, food, and incidentals, were only \$300. Mechanical trouble had been limited to a broken chain link.

For the next few months Miss McKean intends to work as a nurse in



Joy McKean, World Traveler.

Salisbury, Southern Rhodesia, to raise funds for the rest of her journey. Then she will continue via Mombasa, Suez, Alexandria, and across the Mediterranean to Greece. Her route to England will include the Lebanon, Turkey, Yugoslavia, Italy, Switzerland, Germany and France. She will return to New Zealand through North America, travelling from Halifax to Vancouver via Mexico City.

Miss McKean was already a seasoned traveller before she began her present epic journey. During the war she worked as a nurse in England, and toured extensively in the British Isles on a bicycle. In 1950, back in New Zealand, she bought her first motor cycle—a 125 c.c. Bantam—on which she covered 40,000 miles before exchanging it for the machine she is now using. ★

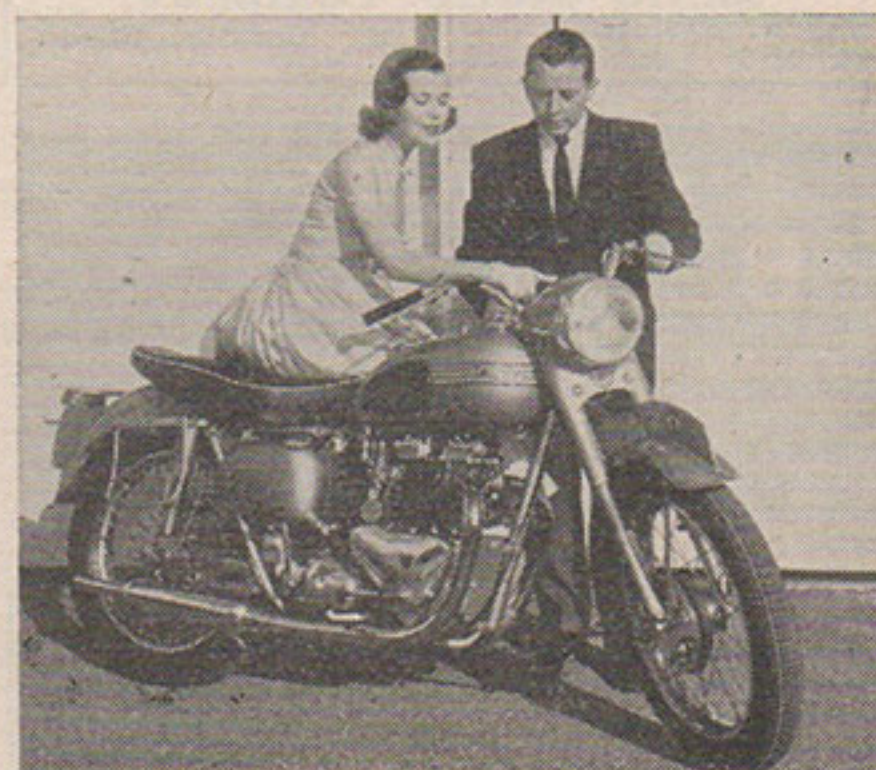
BRAD ANDRES ON GROUCHO MARX SHOW

Grand National Motorcycle Racing Champion Brad Andres recently appeared on the Groucho Marx Radio and TV show "You Bet Your Life." Groucho told his millions of fans that like Brad he was once a motorcyclist. He told of the Marx Brothers troupe riding motorcycles for inter-city travel in their vaudeville days.

He remarked "You know, Brad, I'm an old motorcyclist—never a champion, but a rider just the same. In our vaudeville days, I owned an Indian, Harpo owned a Harley-Davidson, and I forget what make Chico owned."

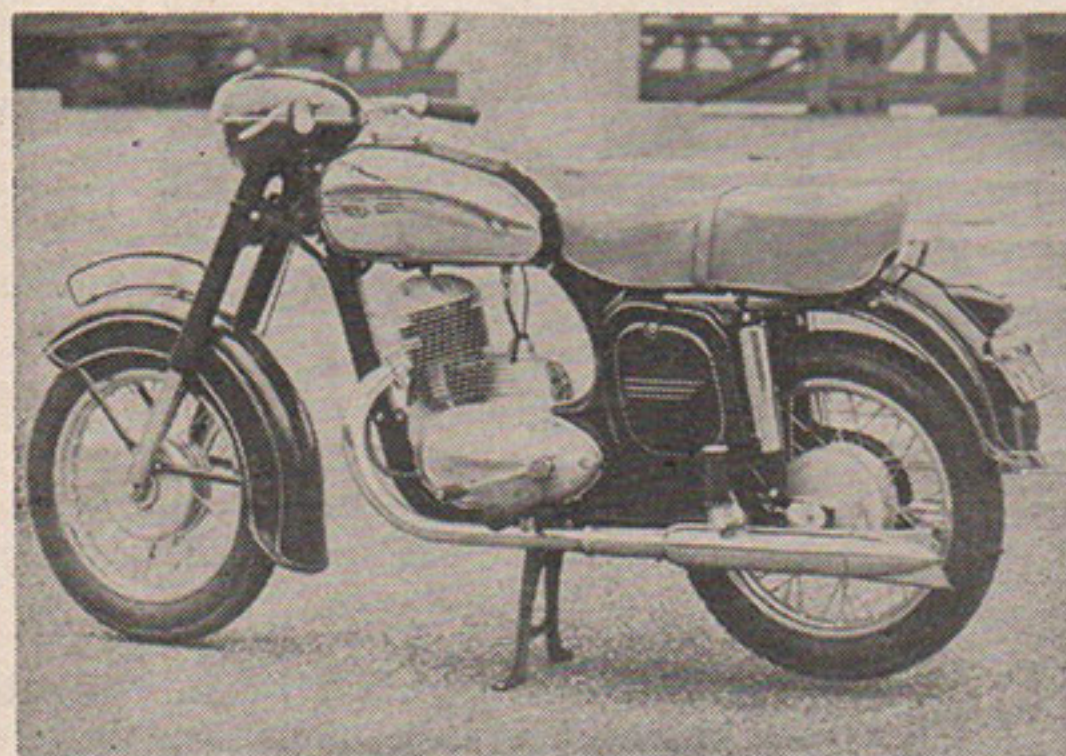
Several months ago in the story of Groucho's life and in the book of his life, he said that sometimes he even took the chorus girls along for the ride on a back seat.

Brad had as his partner an attractive girl, a University of Southern California student. A very nice public relations job for the sport of motorcycling.



WHAT'S THIS GADGET?: Lovely Hillie Merritt, "Miss Rheingold of 1956," gets some pointers from sportscaster Gil Stratton on what makes his new Triumph motorcycle tick. Stratton's KNXT sportscast is sponsored by Rheingold in the Los Angeles area.

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Dear Mr. Clymer—

For quite a few years I have enjoyed reading your fine magazine.

I read all the time about the fellows doing this and winning that. Sometimes I wish I were a man then I too could enter in competition. I think it's a shame they ever quit having womens' competition, but that is water under the bridge.

Now I am proud to report that we girls are not left out all the way. Yes, due to the fine sponsoring and coaching of Cliff and Etta Onan, a group of girls are riding Motorcycles on ice. Actually, it is called Icy-cles.

It has taken many nights of practice and patience on Cliff and Etta's part, but the girls feel they have come through with flying colors. Of course you guessed it. The fellows laughed at the idea of women riding on ice, but believe me I think some of these girls could ride circles around those boys. What can you expect with riders like Dotty Ellison, Pat Michaels, Pat Harker and quite a few others.

They also have a boys team with Jimmie Rae for one team Captain and of Course Bill Todd as the other Captain, who incidently offers many thrilling spills and excitement on ice as he has done on the track.

The boys team ride for one period, then the girls team takes over. It is really quite a game and I don't think the public have ever seen anything quite like it.

We ride Triumph Cubs with quarter inch bolts in the tires to give you better traction. Of course I am not to familiar with these machines, but I understand they have a special exhaust set up so the carbon monoxide will not bother the riders or spectators.

The object of this game is to kick the putt into the opposing teams goal, using only the left foot for kicking. Incidently, the Putt is the tail wheel of a piper cub airplane.

Honestly, there is so much to tell you about the game I don't know where to begin so instead I'll invite you and all of the readers to come out and watch us ride every Saturday night at the South Gate Arena at Southern and Atlantic Blvd. in South Gate, Calif.

Oh yes, before I forget, Club Teams are invited to try their skills against the professional Icycle riders. Of course there are a few restrictions such as you cannot weigh over 150 lbs with leathers, so if you are interested in getting together a club team you can get in contact with Cliff & Etta Onan at the South Gate Arena any Saturday Night.

Eloise Bertush

Redondo Beach, Calif.

Sounds like lots of fun.—Ed.

Dear Mr. Clymer:

I read your magazine with great interest, but I feel that you are heading for a session with the un-American Activities Committee if you persist in your present policy towards Harley-Davidsons.

Over here I have fought the Board of Trade for years to get a license to import just three or four of these fabulous machines per year, and have always been met with cunning evasion and double-talk on the economic problems to be overcome. This

country is prosperous and excuses of this kind are just so much bunk. The U.S. auto factories got together last year and forced this country to accept 650 cars per year for free sale. I and many other H-D enthusiasts here would be happy to have the U.S. government close down on motorcycle imports into the U.S. overnight, and thereby force this country to reciprocate a little. I agree and endorse the comments of your subscriber Stan Blieden on this subject.

You may not realize it, but Harley-Davidson has a very large following of enthusiasts over here, just as you have British machine enthusiasts in your country. This may be strange, more so as we have a large selection of motors to choose from built here. I explain it by it being obvious that our machines lack something which H-D's have, and I'll leave it to you to guess what that is! I have ridden Harleys for ten years, and would not change. I have raced at Silverstone on a '41-61EL and made second, and I own a drag 74FL for use this year in the International Spring Races (Drags). I think I can qualify to know what I am talking about, when I write you a letter like this.

Over here the side valve motor has always been reckoned a pretty slow job against an OHV, and I think that the Competitions Committee is fully justified in retaining the present rule. Don Pink says that American rules were in use before British motorcycles were in the U.S., and I agree with this. As for Bob Schanz I can tell him that a lot of H-D riders here are enraged at his recent article in the "Motor Cycle" wherein he cracked at H-D engineering, whilst describing his sleeve-valve, one-off engine. I think that Mr. Mr. Schanz should obtain many more years of production engineering experience before he hits out at H-D masterminds who have proved on every racetrack in the U.S. this last year just how much power they can squeeze out of a sidevalve motor. A design which has been shelved over here for purposes other than pulling a sidecar!

I service mostly old military models, except for those motors owned by American servicemen. Here we just can't go and buy the parts and accessories we want the way you fellers can. We have to get around every imaginable restriction, and even gift parts from your country are heavily taxed. Yes, despite all these troubles, more and more people are becoming interested in Harley-Davidsons.

I don't know whether you will print this, but your very good magazine has a reputation for fairness, so here's hoping.

Very truly yours,

M. P. Gray

Harley-Davidson Service

Har-Day Works, Askew Bldg.

Shepard's Bush, London W12, Eng.

Dear Floyd—

Your report on your visit in Columbus with the Competition Committee has just been read in the "mag," and I certainly enjoyed it immensely. Your action is certainly a step toward making them have an "about face" from their "closed door" policy.

Just yesterday I sent another \$1.00 to Columbus, for another year's membership dues, and, to be exact, for the 22d year. The thought is daily in my mind, "What can I do to help bring about a more democratic set-up in this AMA 'organization' where I am a member, casting a vote on issues that concern me".

Your reply will be awaited.

Yours sincerely,

Mansfield, Ohio
Woodie Kimes

Dear Mr. Clymer—

This letter may not be of any interest to some people but speaking for myself and the many who ride Motorcycles I think that if it is at all possible to start a drive to stop the theft and stripping of machines I for one heartily approve. Recently we have had a sad experience, one of my sons, Bob, had his Tri. T100 stolen from a parking lot on Pico and Bronson, while having some dental work done. The sad part is that he has done so much work on the machine, and after all when a boy of 17, tears a Cycle down and reassembles it by himself, it is quite a blow to the boy to have it stolen, his means of transportation to school and work completely wiped out. The insurance won't cover all the work he has put into it. True, the experience he has had is very valuable, but he had worked and paid for the Cycle himself and being a boy that has always paid for what he had, he couldn't imagine anyone being so mean as to steal something of his.

The police were very discouraging in giving us any hopes of recovering anything, except the frame and motor, and maybe none of the machine in this part of the country. What is the general opinion of the dealers? There is some outlet for these parts and I can't help believing that if a drive is started by all the agencies, police department, dealers, used parts dealers and the general public alerted to this condition that exists, to say nothing of the insurance companies covering the machines, would be an error, surely something could be done to stop all this, or at least run the hot parts dealers of the business.

We had two Tri. Motorcycles in the family before Bob's was stolen and if the general public and everyone concerned in juvenile delinquency could know what having the machines to work on and keeping the boys home nights working on them in my garage, including several of their friends, has done for us, I am sure that every effort would be made to help the owners of cycles, in halting this thing in every way possible.

I am appealing to you Mr. Clymer, because I think you (if anyone could) can start a drive through your publications and arousing the interest of maybe millions of readers to help combat this theft and resale of parts.

Sincerely hoping that this will be of enough interest to warrant your acting in some way to start a drive to stop this condition, I know there will be many people thanking you for any action you may take.

Mrs. Marguerite Dewberry
2508 West Blvd.
Los Angeles 16, California

The problem of stolen motorcycles in large cities such as Los Angeles is undoubtedly more serious than in cities having a smaller population or in rural Communities. The Los Angeles Police Commission require every dealers to report the purchase of used equipment and we are sure that Los Angeles dealers comply with this regulation. In many instance machines are recovered after a period of time. We believe the Los Angeles Police Department is efficient and do the best they can in a situation such as yours. We also agree that youngsters such as your son should be encouraged to take interest in their machines and work on them, for as you say such efforts certainly do contribute to reducing our juvenile delinquency problem. Usually the young chap who is wrapped up in his interest for motorcycles and in motorcycle activities has no time nor the inclination to become involved with problems that result in juvenile delinquency. We hope your son's Triumph is recovered.—Clymer.

Dear Mr. Clymer—

I have noticed in many of your issues young boys wanting motorcycles and having the opposition of their parents, who say motorcycles are dangerous.

Over the past eleven years I have owned four motorcycles and am planning on purchasing a new one this spring; of course with the consent of wife and baby daughter.

After I graduated from high school my parents were also against my purchasing a cycle, however, I managed to acquire one and since that time I've tried to find out just why people have a negative based opinion of cycling.

First of all I find that many men have at one time in their lives owned a motorcycle and their experience was that within a short period of time they though they had completely mastered the machine, thus resulting in a spill abruptly ending their motorcycle career. Second is the man who is a skeptic about cycling and finally against his will lets some cyclist talk him into his first ride. This ride consists of a dig-out that almost dumps him, followed by a speed that seems a million miles per hour, weaving in and out of traffic and taking corners till the footpegs drag, then to show how stable the cycle is—"See, no hands!" at eighty miles per hour. At the end of this ride, the poor victim is thoroughly convinced that this is his first and last ride, and anyone who rides is a maniac with little respect for his life.

With this in mind, I have talked several people into riding with me and gave them a very slow and easy ride. One gentleman whom I gave a ride was in his sixty's and a prominent business man in our town. He was very reluctant but finally I talked him into it. Afterwards he remarked that the ride was surprisingly smooth and comfortable but more important he was convinced that if he was in his teens or twenties he would have a motorcycle. Altho he may never be a strong enthusiast he surely can say that cycles are one of the safest vehicles on the highway.

I really feel that most people who have a negative opinion of motorcycles have either experienced one or the other of the unpleasant rides mentioned above. Riders, let's keep in mind our everyday riding actions are being observed by the public and we have only ourselves to blame if the opinions are bad ones.

Koehl L. Volisky
Huron, South Dakota

Thank you for an interesting letter, Mr. Volisky. You are so right.—Ed.

Dear Editor & Mr. Clymer—

Your publication creates a lot of interest among cycle readers and riders. You are to be praised and congratulated for many fine pieces of describing and reporting.

Many must have read with great interest the article, "Floyd Clymer Reports on AMA Competition Committee Meeting". As you say, lack of publicity has hurt this committee, the AMA and motorcycling as a sport.

It is interesting to read about topics like this, and to know more about motorcycling organizations. I for one now feel satisfied that the AMA is helping to develop more of the sport than I gave them credit for.

Promotions, locally or nation-wide, will help develop our sports, and public reaction toward it. We need more riders and more people to attend events. The gate receipts pay the expense of promoting. We need others to take up motorcycling as a hobby and still others to purchase their own machines. Clubs can then grow larger and stronger, dealers can expand from profits of selling machines, accessories, parts and re-

pairing, factories can promote or expand or reduce their expenses if more machines can be used in a year around season. Directly or indirectly we all benefit.

The "Teach a Rider Contest" was a fine way to do all of these things together. To all who take the lead in promoting our sport and making it more interesting and enjoyable, a few words of praise and thanks from us all. We appreciate your efforts.

Des Moines, Iowa
Wayne Cromer

Dear Editor—

As an Englishman I feel well qualified to comment on the 30.50 cu. in. ohv verses 45 cu. in. side valve controversy.

I never cease to be amazed at the complaints of some American riders about, in particular, the "so called" discrimination against British machines. Do these riders who are so quick to criticize and imply unfair tactics on the part of Harley-Davidson realize that in England (the country of origin of their machines) discrimination has reached such proportions that no American-made motorcycle is even allowed to be sold in their country?

How would these same riders feel if no British machines had been allowed into the United States for the last fifteen years? That is the situation in England regarding American machines. Don't let the "dollar problem" excuse fool you. There's only one reason—English motorcycle manufacturers are out to prevent any sales competition from American machines.

The whole thing is all rather obvious. I don't remember hearing or reading any complaints in the years when the 30.50 o.h.v. bikes were taking all events. Yet now, with the amazing KK proving its supremacy over one and all, the 45 is suddenly "unfair" competition.

I can only suggest that riders of British machines go to England. They'll have no fear of "unfair" competition there, it isn't even allowed in the country. If a 45 cu. in. Harley rider tried to enter an event over there it would not even be allowed to start, for they don't even have a class for 45 engines.

Brian E. Matravers
Toronto 5, Canada

Dear Mr. Clymer—

As a dealer in Indian, B.S.A. and Triumph motorcycles, I find myself confronted with some questions from my customers that I truthfully can say I do not know all the answers to. Unfortunately, both are questions that are pertinent to all motorcyclists but I have yet to see them covered in the A.M.A. magazine.

First, other than getting a pin for a dollar, what benefits does the average rider derive from the A.M.A.? Also, the structure of the A.M.A.—how it operates and how are officers elected and why the competition committee is not open to the public in true traditional American custom.

Secondly, what reasoning does the A.M.A. use in arriving at the conclusion that overhead valves make 15 cubic inches difference in 2 cylinders, then in an eight cylinder car there would be 60 cubic inches difference; yet, when Ford changed from the L head to overhead valves why was there no noticeable change in top speed?

If the A.M.A. cannot answer these two questions without beating around the bush, then changes should be made for more fair competition.

John W. Hutchison, Jr.
Louisville, Ky.

Sorry we can't give you the answers—ask the A.M.A., 106 Buttles St., Columbus, Ohio.—Clymer.

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Cycle Magazine—

This is a Thank You letter for all those wonderful people who in one way or another helped me enjoy my motorcycle vacation in the U.S.

Two members of the Witch Riders Motorcycle Club, Juijui Rivas and the undersigned had the opportunity to visit the U.S.A. this year. Since the moment of our arrival in the small rural community of Andover, Conn., we were taken under the protective care of Col. Nathan B. Gatchell who rode to our country a year ago. Mr. Gatchell opened his heart, hands, and home wide open to us, and we were his guest for 2½ months. Through him we met the most wonderful people of Conn., and Mass.

On the 2nd day of our arrival, through Ed Brunnette and John C. Hutchison, president and road captain of the Burts Riders Motorcycle Club, we met Harley-Davidson dealer Burt Ives, who in a friendly act of true motorcycle sportsmanship, let us have one of his motors. Since the moment we had two wheels, our trip began far and wide. Many places of interest were visited, places few ordinary tourists from Latin America ever see, and on these rides we always had two or more members of the Burts Riders escorting us.

Invitations to dinners were had almost every night, most of them among motorcycle people, all of whom showed us what real New England hospitality is like. Homes and hearts opened at the magic spell of motorcycles. Honor, invitations, rides, went on day after day, until the very day of our departure.

The highest honor received came from the Meriden (Conn.) Motorcycle Club and the Burts Riders Motorcycle Club who awarded us Honorary Membership cards in their organizations. An honor that we hope to fulfill as best we can.

Being motorcycle riders, our Goal was the American motorcycling melting pot—Laconia, N.H. Here we enjoyed three days of motorcycle activity every rider in the world dreams of, and so few of us riders outside the U.S. ever see their dreams come true. While at Laconia, I had the rare opportunity to meet pen pals of many years. Mrs. Anne C. Yette, most popular girl rider, and Harold Evans, twice winner of the best chrome and accessory equipped motorcycle, and to top this, the meeting of Mr. E. C. Smith of the AMA, and Mr. Walter Davidson of the Harley-Davidson motorcycle factory, with the spectacular 100 mile road race, closed to us a golden chapter of motorcycle activity.

To all the fine people (motorcycle riders 100% of them), like the Brunettes, Burt Ives, Burt Gaylor, Hutch of the Burts Riders Motorcycle Club, and to the members of the Meriden Motorcycle Club, Oscar Freeman, Carl MacAllister, and all the other motorcycle riders who in one way or another made a dream motorcycle vacation come true and entertained us like Kings on a tour, a Million Thanks. A special word of gratitude must be said to Nate Gatchell for everything he did so freely for us. His home was our home, his friends our friends, and his joy our joy. A wonderful man in every sense of the word. Gracias, Nate.

Now our hope is that some day in the not far-away future, motorcycle riders from the states may visit us, and then we will try and repay all the Deluxe treatment we received.

Gracias Amigos Y Hasta La Vista

J. Ernesto Meza

President of the Witch Riders MC Club
Santa Ana, El Salvador

Welcome words—Ed.

Dear Sir—

Several students here at Oberlin College are interested in touring Europe by motorcycle. We would like to know to whom to write for information about buying motorcycles in England from English dealers (as opposed to ordering them through an American distributor). We are interested in Triumph and B.S.A. Enclosed is a self-addressed envelope.

John H. Lovell
240 Elm Street
Oberlin, Ohio

You would save money by ordering either a Triumph or a BSA as you mentioned, from a dealer in the United States and paying in U.S. dollars and then delivery could be made in England. As owner, you could ship the machine to the States upon returning.

If you wait until you arrive in England to purchase a machine, you will be immediately taxed with the exorbitant purchase tax which is about one-third the cost of the machine. For instance, if you would buy a \$600.90 motorcycle, about \$300.00 would be added on for purchase tax. Americans who are inclined to complain about sales tax, do not know how really lucky they are.—Ed.

Dear Sir—

Some months ago, there was a letter in the mail pouch requesting a road test on the Indian Trailblazer. I waited for this road test for a long time, but decided to wait no longer and I bought a 1955 Trailblazer a short time ago. I think it is a wonderful machine, and you will note by the picture that it is fully equipped. There are a lot of girls in Mobile who like Indians and they also read CYCLE Magazine.

Mrs. R. W. Tillman
Mobile, Alabama



Mrs. R. W. Tillman

We have had many requests for a Trailblazer road test. The 1955 Indians were slow in arriving and the Indian Co. and CYCLE thought it would be best to wait until the 1956 models were ready. Indian has promised us a Trailblazer as soon as the 1956 models arrive. The road test will appear in the earliest possible issue. Thanks for your comments about CYCLE.—Ed.

Dear Sir—

I have been reading CYCLE for about 4 months now. I just recently started reading it when I became interested in motorcycles. My brother has a 1953 Mustang which I ride. I enjoy your road tests very much. I got the impression that you just had road tests on big cycles until I saw the Simplex

road test in the February issue. I would appreciate it if you would test a 1956 Mustang. I believe Mustangs are one of the best cycles. I think the public should know more about this simple (?) little machine.

Leonard Henre
Kansas City, Kansas

Thanks for your letter and comments. We hope to road test a '56 Mustang when one is made available to us.—Ed.

Dear Mr. Clymer—

I have read your comments on the ban on American motorcycles with great interest. I join you in wishing it were possible for all countries to be free markets, but at the present time this is impossible.

Most of the countries which prohibit the sale of American manufactured machines are members of the British Commonwealth. These nations suffered terribly during the war, and stringent limits on imports are necessary if they are to avoid bankruptcy.

I would suppose that your editorial was prompted by the present sad shape of the motorcycle industry in the United States. It is no secret that spokesmen for the Harley-Davidson Co. have urged that higher duties be placed on motorcycles imported into this country, and most of the other domestic producers are feeling the pinch. It seems to me that the decline of the home producers is of their own making and would be unlikely to be improved by the simple expedient of outlawing competition.

If we accept the theory that manufacturers exist to serve customers and customers know best what they want, the American motorcycle industry looks rather stupid. Sales prove that the British and German models are the kind of machines that today's riders want to buy. Surely the consumer research departments of our biggest manufacturers can see the trend. If they ignore it too long they may share the fate of the Indian co.

My solution to the problem faced by the American producers is not a simple one, but I feel sure that it would be successful. First, dealers of American machines should have a friendly greeting for every motorcyclist who calls at their premises regardless of the make of machine he rides.

Too often riders of imported machines are made to feel unwanted. Second, American manufacturers should evaluate their designs in the light of the riders' desires. Design changes are expensive, but not as costly as declining sales. Third, the AMA should be reorganized around a core of people who are dedicated to advancing motorcycling instead of one particular manufacturer. It is no secret that many riders contemptuously refer to the AMA as the Harley-Davidson Owners' Club, and the unfair actions of the competitions committee do not serve to refute this opinion. Finally, the AMA should become affiliated with the FIM.

I feel sure that if these steps are taken motorcycling in America would progress in a much more healthy atmosphere than exists at the present time.

Sincerely yours,
Orwin G. Mobley
Denton, Texas

Dear Floyd—

The first fellow that rode the Triumph I won in CYCLE's Teach-A-Rider Contest apparently stole it. He said he like it and wanted to take a test ride and he is still riding.

Bill Knuth
Milwaukee, Wisconsin

Too bad, Bill. I hope you get it back.—Ed.

Dear Sirs:

You Goofed! I just went up to the P.X. and picked up my February CYCLE and was shook so bad when I opened it that I just had to let you know about the "Boo Boo." You've probably already heard about it by now but just in case you haven't, you mismatched the pictures and wording on the BSA Rocket and Golden Star on Page 26. I know everybody goofs, but don't ever goof on my Rocket again. Us Doggies dig the CYCLE the most.

Cpl. Bill Dohmen
Ft. McClellan, Ala.

We certainly did and several "eagle eyed" readers spotted the error where BSA Road Rocket and Gold Star captions were transposed. Sorry.—Ed.

Dear Sir—

I just got my February issue of "Cycle" and while glancing at the article on page 26 dealing with B.S.A. improvements, I noticed that you have some of the photos mixed up.

The top picture is supposed to be a "Road Rocket" but I believe it is actually a "Shooting Star". The lower photo on the page is supposed to be a "Golden Flash", but it is the "Rocket" in the picture and, finally, the photograph at the top of page 27 is actually a "Golden Flash" and not a "Shooting Star".

Now that I have finished criticizing, I would just like to say that in my opinion "Cycle" is the best motorcycle magazine going and I think you are doing an excellent job in the interest of the sport.

Richard Randel
Bayside, New York

Thanks Richard. Our picture editor has been relegated to the clipping department for the duration.—Ed.

An item of great interest to me appeared in the Michigan News column of Motorcyclist Magazine, October issue, in which the writer, Ivan J. Stretten, described a 4-cylinder motorcycle with electric starter, fluid coupling and enclosed drive shaft being tested in Michigan. This machine is to be manufactured by automation production methods which, conceivable will keep the cost low. If so, it could well be the answer to a commuter's prayer.

Cliff Boswell
Arroyo Grande, Calif.

Editor:

I note that Bob Shantz wrote on a man experimenting with rotary valves. The rotary valve is as old as Adam and Eve and was run at 12,000 RPH over twenty years ago in England. It was then cast aside as a failure. The Barr and Stroud sleeve valve engine was a lovely precision job, had terrific power at low speeds but overheated and would not attain poppet valve RPM. The bearing surfaces were too large. It would not allow for any variation of valve timing. Norton were the first to really exploit overlap valve timing which gave a slight supercharging effect. Norton, at all times were too smart to employ high valve lift, also they were early to realize the importance of light oscillating and reciprocating parts. Their performance was achieved by straightforward design and not by high compression and dynamite or such crude methods. I believe they also originated a unique method of shortening the valves, and the valve springs in 1924. Seekers after speed note the first OHV Norton in 1923 employed light alloy tubular adjustable push rods. They knew the importance of having as few coils in valve springs, keeping widely spaced springs to eliminate dashing and spring breakage. I do not believe there has been a cycle made that has not benefited by the

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pioneer efforts of Norton. The record-breaking NSU was partially designed by Walter Moore who left Norton to work for NSU. After riding every model since the BRS Norton racing side valve, and after having worked on them all I consider the Manx and International the greatest road speedsters ever devised by man. I am 60 but hope to get hold of a classic road gobbler before long. I would be pleased to answer any letter to the best of my knowledge especially regarding these machines. I regret they seem to have no backing in the US, also I have examined many and never found one that was properly set-up. The average American wants 100 or 120 mph and the ability to trickle along in Top behind traffic, well these machines.

Anyone who yearns for a Manx or International should first learn the art of motorcycle riding. I welcome inquiries or comments.

John Whelan
Philadelphia, Penn.

Sirs,

I would like very much to take exception to the letter by Major Kerr in the latest Cycle stating that the reason the Vincent machine went out of business is due to its Vee Twin layout. This seems a rather remarkable statement in view of the fact that in the past few years every car manufacturer in the USA has dropped the inline engine in favor of a Vee layout, that the most popular motorcycle in the USA is a Vee twin (Harley), and that in the same issue is an account of the Zimmerman engine, which is probably the most efficient motorcycle engine in existence, and is also a Vee layout. It is true that there are only two companies in the world producing Vee twins for touring—Harley of USA and Rikuo of Japan, and three others for racing—J.A.P. of England, Abe of Japan, Husqvarna of Sweden, and lately, Moto Guzzi of Italy. The decline of Vee twin popularity in motorcycles is due to the fact that it is more expensive to produce, and that in recent years there has been a trend to smaller displacements due to economic conditions. Thus the reason a bike does or does not sell is simply due to what it is going to be used for. Before the war, back in the 20s and 30s cycles competed in popularity with cars, but a higher standard of living and vast improvements of the latter, have reduced motorcycles in the USA to the status of a toy—a sporting device, but hardly anything the average person would consider taking a long trip on. On the other hand, in foreign countries the standard of living is so low and distances are so short, that a small displacement one lugger is almost the standard. In Japan, where there are close to, 60 companies producing motorcycles about 80% of the output are machines of 125cc. or less.

Thus the question is, what is the machine built for? If it is for competition we have Manx Nortons, and should make no phoney claims about it being a modified street machine. If it is for purely going to work, a Simplex is fine, for the dirt an AJ is good, for a sidehack anything with lots of cubes and endurance is a must. I feel, as do the Harley engineers, that the Vee twin is the ideal motorcycle power plant, and that as the standard of living rises abroad, we shall see the introduction of many Vee twins, which shall eventually totally eclipse the current mania for vertical twins. For sheer guts and power a Vee twin is unbeatable, as the many records of Harley, Indian, Crocker, Moto Guzzi, Excelsior, Vincent, AJS, etc. testify to this day. When Vee twins start appearing with improvements such as narrow angling, male balanced rods, all alloy lay-

out, shaft drive and rotary valves, cast mono blacks, fuel injection, two throw crankshafts, and improved oiling systems, we shall see other types fade away.

The Vincent went out because it was too good a machine and rather than cheapen it by mass production the manufacturer discontinued it. But when the day comes that in this country people again start using motorcycles for purposes now reserved for Detroit's lead barges, and when the knowledgeable of other lands can afford it—the big Vee will come back with a vengeance. It is indeed fitting that the Vincent will probably show the way, in view of its being 15 years ahead of the times. Contrary to the opinions of many of the shortsighted in this country the streamlined Vincents were selling at a ratio of 8 to 1 over their unenclosed machines and the stories of comfort, ease of handling in heavy winds, and safety in crashes that have been recorded about the late "Series D" indeed make it seem they were the "World's most advanced standard motorcycle."

Vaughn M. Greene
Fleet P.O. c/ P.M.
San Francisco, Calif.

Dear Mr. Clymer:

Your CYCLE is tops, without a word of doubt. It is educational as well as interesting to a group like ours. We are The Aces, a small organization of all girl riders who are just starting out as a club. Though, as yet none of us own a bike—we are planning to as soon as it is financially possible, which as we see it now, is to be the not too distant future. For the present, however, we have a steady list of riders.

After reading of other clubs who are just starting out we decided to write and "clue you in" as to our existence, because we would like to hear from other "young" clubs like us. We are in hopes that we could exchange suggestions with them on matters concerning our groups.

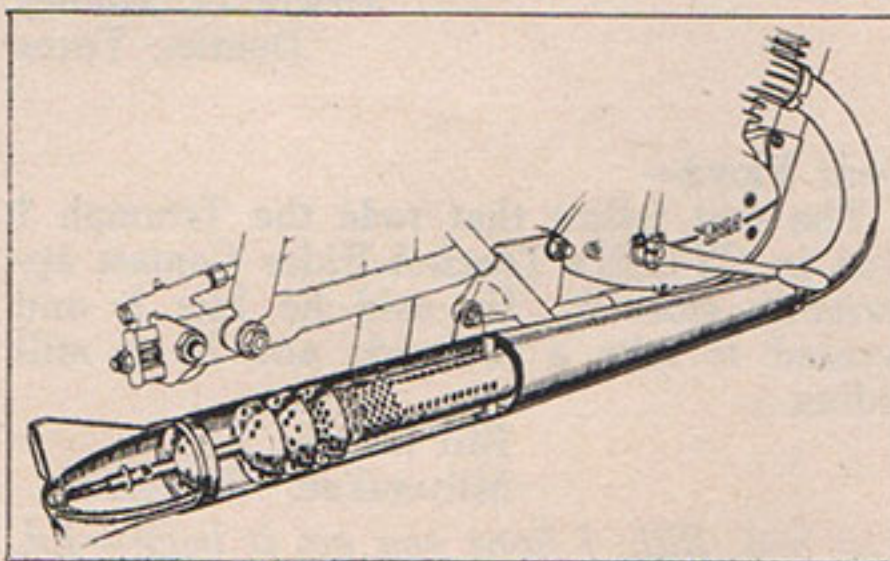
Keep up the good work in CYCLE.

Secretary,
Aces M.C.
P.O. Box 123,
Welmouth Landing 88, Mass.

IMPROVED SILENCER ON BSA TWO STROKE MODEL

A fact well known to motorcycle engineers is the difficulty of effectively silencing two stroke engines without causing power loss. BSA announces that their new type silencer as applied to tax the 1956 150 c.c. "Bantam Major" model is a long step toward the answer to this heretofore bothersome problem.

Illustrated in the accompanying drawing, the new BSA silencer features an exceptionally large expansion chamber in its forward section plus detachable baffles and fishtail to facilitate decarbonization. BSA states that this new silencer (we call 'em mufflers in the U.S.A.) gives increased power output from the snappy 150 c.c. "Bantam Major" engine without raising the noise level of the exhaust.



Short

Sports



By Gib Black, Editor

TEXAS SCRAMBLES

The Mineral Wells Asphalt Aviator's M/C staged a very successful scrambles on 12 February. Stoker was top man for the day. He won the 200 cc and the Final on a Triumph Cub. He also took the Open class on a Tiger 110. This brings his total Trophies to 36 for the last two years which is pretty consistent riding.

Carleton Williamson won the 500 cc class on an Indian.



Above—Bob Stoker

Below—Carlton Williamson



Cox Wins Aztec 50 Mile Rough Circle TT

The Aztec M.C. Club Grounds at Sweetwater Lake, near National City, Calif., was the scene of the 10th Annual running of the 50 mile Rough Circle TT race meet, Feb. 19, 1956.

The weatherman provided a clear, sunny day, with the temperature in the mid-sixties, and to the more than 1000 spectators it furnished ideal conditions to watch the grueling race.

In the 26 entries, there were many top notch riders, such as Bud Ekins, who needs no introduction; Harry Loftus, San Diego's number one sports rider last year; Jack Simmons, number two last year; and Marv Hall, number four last year. If there can be any

pre-race favorites, the above four could be classed as such.

The entrants lined up three abreast, after drawing for starting positions, and Arvin Cox drew number 11. He got a good start at the drop of the flag, and when he got around to the check point after his first lap, he was in first place, a position he did not relinquish throughout the race.

Harry Loftus and Bud Ekins started out in the back row, and at the end of the first lap were in 5th and 9th place, respectively. At the end of the second lap, 4th and 6th. The crowd could sense a beautiful race developing for second place, and the excitement was beginning to rise. Arvin Cox, by this time, had opened up a half a lap lead over the second place man, Ralph White, and on a mile and one third course this was quite a distance.

By the end of the 4th lap, Cox was losing ground, very slightly, to the second and third place men, Loftus and Ekins. These two were running neck and neck, thrilling the crowd with every move, until the 7th lap, when Loftus went down and bent his forks, causing him to retire from the race.

Ekins, moving up to second place, really started pouring it on, and he was gaining 10 seconds each lap on Cox. At the end of the 15th lap, Ekins had closed enough ground on Cox to cause him to cast worried glances behind him when he had the chance.

As Cox finished the 16th lap, he was followed by Marvin Hall, and everyone near the check stand and the pits cast quizzical glances at each other. They were soon answered when Ekins came limping in to the pits without a clutch. It was smooth sailing from here on in for Cox, and by the 19th lap, he had lapped the entire field.

Jack Simons went out of the race early with mechanical trouble, and Jack Brust, Jr., in 7th place at the end of the 32nd lap, also had to retire with mechanical difficulties. Brucke Barlow, running 3rd in the 26th lap, had the tough luck to run out of gas at the far end of the course, just opposite the pit location.

As the checkered flag dropped to end this grueling test of men and machines. Marvin Hall and Ralph White finished in that order behind Arvin Cox.

RESULTS:

1 Arvin Cox	Triumph	38 laps
2 Marvin Hall	BSA	37 "
3 Ralph White	Matchless	37 "
4 Frank Hubbard	AJS	36 "
5 Howard Livermore	Matchless	36 "
6 Carl Rehberg	BSA	36 "
7 Bill Steider	BSA	35 "
8 James R. Barrera	AJS	35 "
9 Lance Alley	Matchless	35 "
10 Francis Wellong	Matchless	34 "

Cox Captures 50-Mile Race

San Diego, California, Monday, Feb. 20, 1956

Santa Monica's Arvin Cox captured the 50-mile headline event on the annual race program sponsored by the Aztec Motorcycle Club yesterday near Sweetwater Lake.

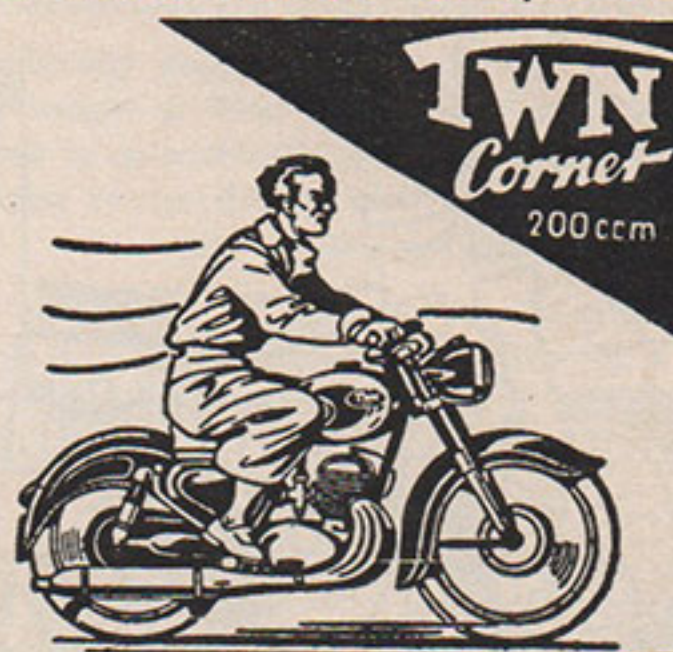
Marvin Hall of San Diego came in second and El Cajon's Ralph White copped third. Leaders:

Main event, 50 miles rough circle—Arvin Cox, Santa Monica, Triumph; Marvin Hall, San Diego Lions, BSA; Ralph White, El Cajon, Matchless; Frank Hubbard, San Diego, AJS; Howard Livermore, San Diego Squirrels, Matchless; Carl Rehberg, San Diego Lions, BSA.

Lightweight motorcycles, 12 miles—Tony Rossetti, San Diego, Francis Barnett; John Collins, San Diego, Dot; Bob Heim, El Cajon, Francis Barnett.

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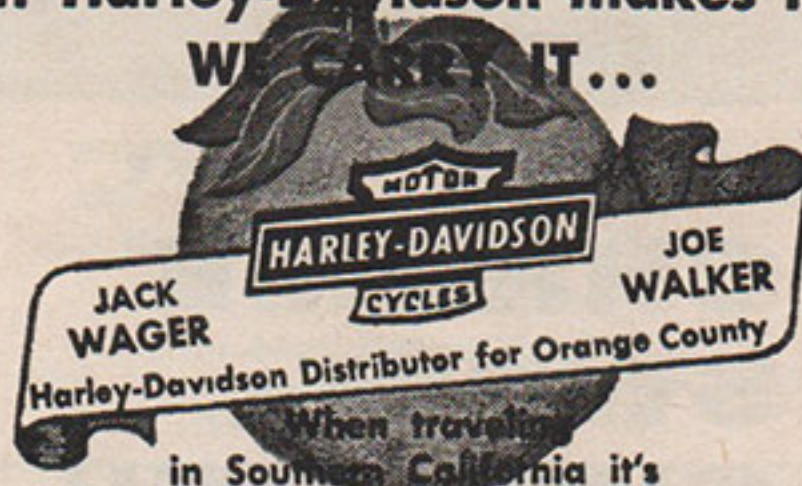
BOSS 350 cc. — BDG 250 cc. — BDG 125 cc. — FIPS 50 cc.

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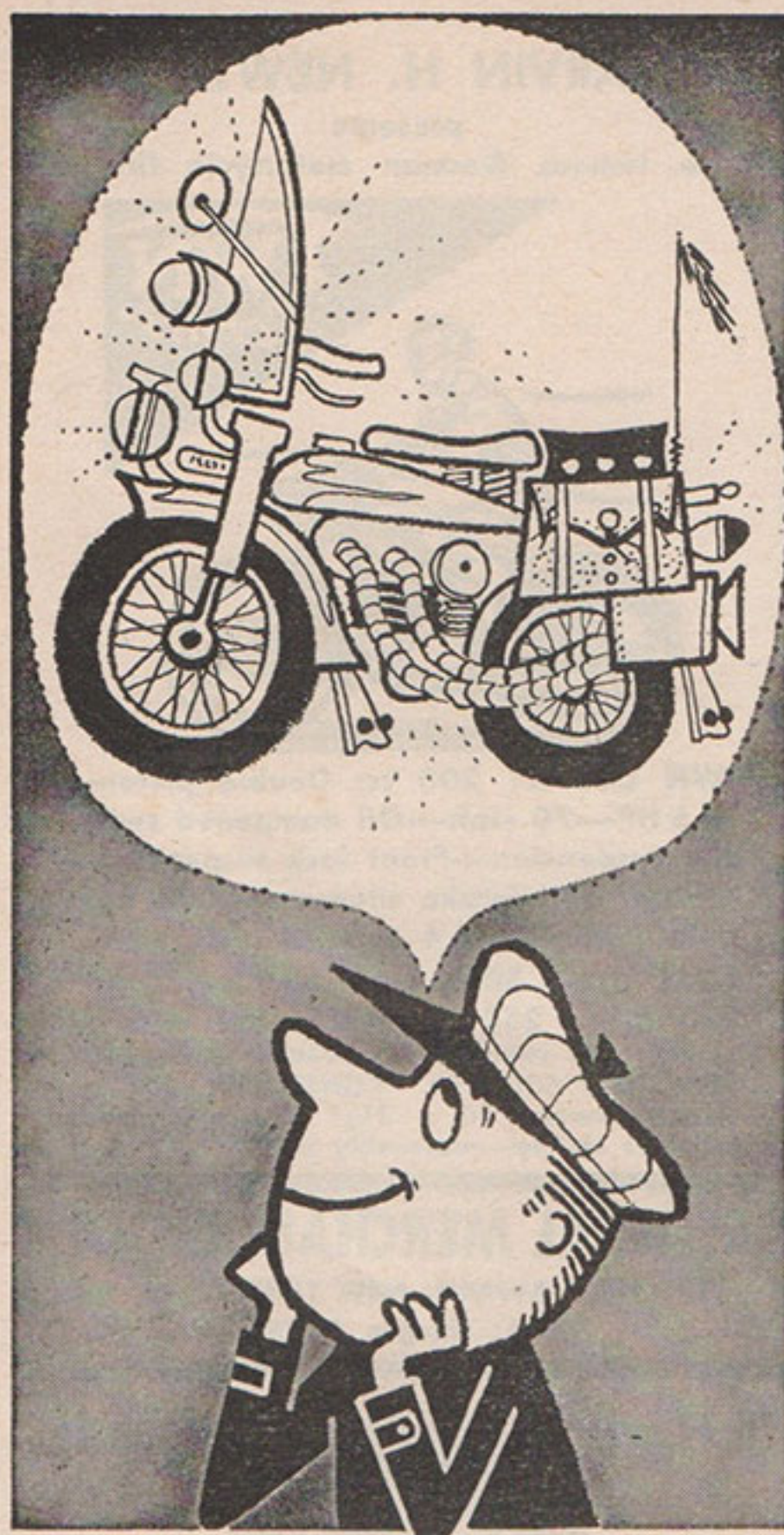
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**Whiting Has Fastest Time
in City Motorcycle Races**

Charles Whiting of Gainesville, Florida, registered the fastest time in six heats in the Gainesville Roadrunners' motorcycle races at the drag strip near Citizens Field yesterday for the March of Dimes.

Whiting ran the six-lap course in two minutes, 15.5 seconds on a 165cc Harley-Davidson to win the fourth heat. Second best time was made by Bob Aldous of Jacksonville, two minutes, 17.8 seconds.

Featured events were called because of rain and will be held Feb. 19, but the races brought in \$76.19 for the polio campaign.

Winners of the heats:

1st — Frank Campbell, Gainesville, 2 minutes, 36.2 seconds; Jim Aldous, runner-up. (125cc class).

2nd — Bob Aldous, two minutes, 17.8 seconds; Whiting, runner-up. (165cc class).

3rd — Don Abernathy, Gainesville, 2 minutes, 29.5 seconds; Bob Whitehouse, Gainesville, runner-up. (200cc class).

4th — Whiting, 2 minutes, 15.5 seconds; Bob Aldous, runner-up. (165cc class).

5th — Bennie Brobham, Gainesville, 2 minutes, 27.3 seconds; Larry Hatchett, runner-up; Bob Burton, Jacksonville, third.

6th — Jim Aldous, 2 minutes, 42.3 seconds; Mike Gallagher of Daytona, runner-up. (125cc class).

Whiting won the time trials with a time of 21.8 seconds on a 165cc Harley-Davidson, followed by Abernathy, 22.1, 200cc Triumph.

Complete times:

Bob Aldous, 22.1, 165cc Harley-Davidson; Larry Gracy, Gainesville, 22.8, 165cc Harley-Davidson; Bill Tolley, Jacksonville, 22.8, 165cc Harley-Davidson; Hatchett, 23.8, 150cc Triumph; Whitehouse, 23.8, 200cc Cundapp; Brobham, 23.9, 200cc Triumph; Burton, 23.9, 165cc Harley-Davidson; Campbell, 25.1, 125cc Cheez; Jim Aldous, 25.9, 125cc Harley-Davidson; Mike Gallagher, 26.4, 200cc Villier; and John Gallagher.

Fred Ephrem of the American Motorcycle Assn., Jacksonville referee, officiated at the races.

RESULTS

**Southern California
Motorcycle Club
Sportsman T. T.**

Jan. 22, 1956

Expert Main

1. Bud Ekins
2. Walt Axthelm
3. Arvin Cox
4. Paul Grimes
5. Chas. Hockie
6. Bill Brown
7. Al Colley
8. Chuck Minert

15" Main

1. Dave Ekins
2. John Barnes
3. Paul Splan
4. Bob James
5. Leon Evans
6. Robt. Hoad
7. Chas. Drudge
8. Claude Sistrunk
9. Hank Scott

Amateur Main

1. Ricky Collins
2. Sal Collura
3. Bill Anderson
4. Pat Hicks
5. Bud Beebe
6. Max Melchert
7. Roger White
8. Grrant Ryan

21" Main

1. Bill Zimmerman
2. Jerry Ballard
3. Jerry Schuster
4. John Penner
5. Dave Ekins

200 CC Main

1. Elmer Rasmussen
2. Douglas Evans
3. Ronald Gunter
4. Bll Landerfield
5. Bob Belt
6. Bill Messer
7. Ed Gomen
8. Henry Ramirez
9. Ron Rippand
10. Sal Collura
11. Jim Choner
12. Ken Harryman
13. Donald Bual

125 CC Main

1. Nick Favour
2. Gary Delay
3. Bob Eischen
4. Jim Granger
5. Bill Smith

1st Amateur

Consolation

1. Blair Bernbaum

2nd Amateur

Consolation

1. R. B. Moore

BENEFIT RACE for HEART FUND

The Northern Eagles Motorcycle Club Ice Race scheduled for January 22nd, was postponed to January 29th, because of the extreme cold weather. Here are the results of the January 29th and February 5th Ice Race held at Laddie Lake.

Lightweight class	Jack Dickinson	Maico 200
Middleweight class	Roy Egeberg	H-D 45
Heavyweight class	Dave Webster	H-D 74
Australian pursuit race	John Egeberg	H-D 55 KH

Official Results

Conn. Ramblers Third Annual Snow Trail Run
February 12, 1956
Heavyweight Class (200 cc & up)

NAME	MACHINE	SCORE
Wolfgang Schiessl	Tri.	962
Sal Scirpo	Tri.	947
Christy Scholar	BSA	932
Don Gore	H-D	915
Bob Micas	BSA	910
Bob Knight	Tri.	889
Bob Burnett	Tri.	885

Lightweight Class (250 cc & under)

Joe Kastner	H-D	966
Robert Mortensen	BSA	959
Everett Wright	Dot	956

(Continued on page 27)

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"THIS" IS A TWO-STROKE?

YOUR engine is known as a two-stroke. This works in the following way:

Inside the corrugated metal box an egg-like thing moves up and down. When going up, it passes two holes and squeezes the gas. Down below, a nothingness is created, then a hole opens and some new gas comes in from the carbur-- from the thingumbob that makes the mixture. Up at the top, when the gas has been squeezed as hard as possible, a little spark flashes. This blows up the gas and knocks down the egg-like thing. Now it gets really interesting, because as the egg-like thing goes down, a hole re-appears and the gas makes a quick getaway. Then the hole at the bottom closes again, and shortly after, two more holes come on the scene. Yes, you've guessed it! The new gas skips through latest holes and waits at the top for the egg-like thing to come up again and squeeze it.

Of course, by now you are just dying to know what makes the spark that blows up the gas that knocks down the egg-like thing that uncovers the holes in the corrugated metal box. This is simplicity itself.

Below the corrugated metal box is a roundish container. In this container is a Whatsit that spins round a Doofer. The Doofer has magnets and a bobbin of wire in it, and as the Whatsit spins round, an electric current is made. Then a couple of discs pull apart and come near together again. This causes extra electricity to travel up along a bit of wire to what is technically known as a Plug. On this Plug are a couple of prongs.

Now then, the electricity jumps from one prong to the other. This is warm work, and, quite naturally, the electricity gets overheated and sparks start to fly.

Really, it is difficult to see why some people can't understand these things.

That's about all there is to it, but I will just mention a few odds and ends that help to make up the whole unit.

There is the Clutch, for instance. This is simply a few table-mats stood on end and fastened to some springs. You may have noticed that on your handlebars is a kind of lever affair that you can move in and out when the fancy takes you. Now, when you move the lever out, the table mats join together. When you pull it in, the table mats come apart. Actually, I don't really think there is any reason for doing this, except just to give the driver something with which to occupy his mind during a particularly tedious journey.

Then there is the carbur--- (I can never remember that word)—the thingumbob that makes the mixture. Although this gadget looks very mysterious and knobbly shaped, there is nothing to it. Gasoline pours into it from the tank, and stops in a chamber. In the chamber is a float that has a sewing-machine needle (Size No. 1) stuck through it. This float sails on top of the gasoline, and the needle regulates how much liquid goes into the next compartment.

In this next compartment the gasoline is greeted by a gust of air and another needle. This combination turns the liquid into a spray of gas.

And that's all there is to it. The only thing that can go wrong is when a foreign corpse (or is it "body"?) decides to enter. But obviously, the chances of this happening are slight—unless you happened to be touring on the Continent.—From Power and Pedal.

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Don Cameron doing 96 mph on a 125cc Walsh-Bantam



THE GRAND TOUR

Story and Photos by Paul Davidson

After about 365 days of planning and almost as many trans-oceanic letters, the arrangements were made. With the invaluable help of our school, Albany Medical College, one of my classmates, Anthony Gristina, and I were to study in England for the months of July and August at Sheffield Medical College and the Salisbury Infirmary respectively. June, the vacation month, was to be spent touring Europe on Triumph Motorcycles. We ordered the cycles through Ray Goodrich, Triumph Dealer, of Hoo-sick Falls, New York, and elected to pick them up in London.

After arriving at London Airport and passing customs, we were shortly on the seats of the cycles. One was the Triumph "Tiger 110" (650), and the other a "Tiger Cub" (200). Finances necessitated the latter, but we rationalized that it would be a good chance to compare their relative values on a long trip. Due to misinformation from some well-meaning friends at home, we found ourselves without the most important document of them all, a *carnet de passage*. A *carnet* is a guarantee that we will not sell the cycles out of the country as long as they are registered in England. The biggest shock was that 60% of the value of the cycles had to be deposited to get these expensive pieces of paper. The Royal Auto Club proved indispensable by getting the *carnets* and also our ferry tickets within two days, while it would have taken us over a week by ourselves. After much grumbling and balancing the budget we found ourselves on the ferry from Dover to Dunkerque. From Dunkerque to Boulogne the pleasant coastal scenery was disrupted by cities suffering extensive war damage. Inland to Paris, good roads carried us through the beautiful undulating French countryside. We reached Paris by nightfall and stayed in one of its gayest sections, St. Germain-des-Prix on the *Left Bank*. The city is unbelievably alive and beautiful, varying between the irresponsible night life of Montmartre and Pigalle to the quiet scenes of the Seine by moonlight and of Notre Dame.

After side-trips to Versailles and Fontainebleau we had a chance to see what the cycles could do over hilly country. The road to Geneva went up to 3800 feet over twisting roads. Over level ground, the "Cub" cruises comfortably at 50-50 mph, and with some vibration, which isn't found in the "T-110", even at 80 or 90 mph. On the hills, with grades of about 1 in 12, the "Cub" could make 40 to 45 mph without great difficulty, driver and baggage weighing about 200 pounds.

From Geneva to Cannes, on the Riviera, the road passes through the French Dauphine Alps along the Route Napoleon. The road, in some sections attains a gradient of 1 in 8 and passes through scenes of valleys, snow-capped mountains, and roads cut through solid rock. The "T-110" took these easily, but at times, 30 mph became the limit for the "Cub".

From Cannes, almost to Rome, the journey was over good roads with the light blue and green warmth of the Mediterranean to our right. A little excitement was provided by the "T-110" racing a Lancia at speeds up to 95 mph along twisting coastal roads. For no good reason, a few spokes on the rear wheel of the "Cub" broke and



Picadilly Circus, London.

were replaced by a good Italian mechanic in a small shop. Service for most British motorcycles is only found in a few major cities in Europe and improvised parts have to be used elsewhere. Luckily, no major repairs were necessary on the trip.

Rome provided excellent sight-seeing and a chance to draw on our experience in Paris of driving through wild continental traffic. The warm weather apparently agrees with the Italian cyclists and they treat every side or main street like it was the New Jersey Turnpike, speed limits being non-existent though.

From Rome, we went to North, through Florence, over the Appenines, and along the Broad Po Valley to Venice. In Venice, travel was restricted to motor boats and Gondolas. The city was the most unique we saw and seemed a million miles away from the modern world. A short ride on the ferry took us to the "Lido", Italy's fashionable seaside resort, where we spent a few hours basking in the sun and swimming in the warm and gentle waters of the Gulf of Venice. We met an English family here who invited us to their home in Bournemouth, which is only 20 miles from Salisbury, where we were to study during August.

From Venice, the "Austrostrada", a four-lane highway, stretches to Milan, with views of the southern spurs of the Italian Alps to the right. From Milan, it is but a short distance northward to the city of Como and its renowned lake Lake Como is shaped like an inverted "Y", and the mountains rise sharply from the shore. We took the road along the lower western limb of the lake. The road is narrow and winding and affords magnificent views. Like the villages along the lake, the road is a few hundred feet above the water and is carved out of the mountain. A small ferry carried us across the Lake from Bellagio to Menaggio, two quaint towns on the lake shore.

We approached the northern shore of Lake Lugano as the sun was slowly setting over the peaks of the snow-capped Alps. When we had nearly reached the city of Lugano, it was fairly dark and from the distance the city looked like something out of a fairytale. Lights from the houses and cafes along the shore reflected in the lake, and a string of lights along the route of the cable car ran up to the mountain top, which was ominously outlined against the evening sky.

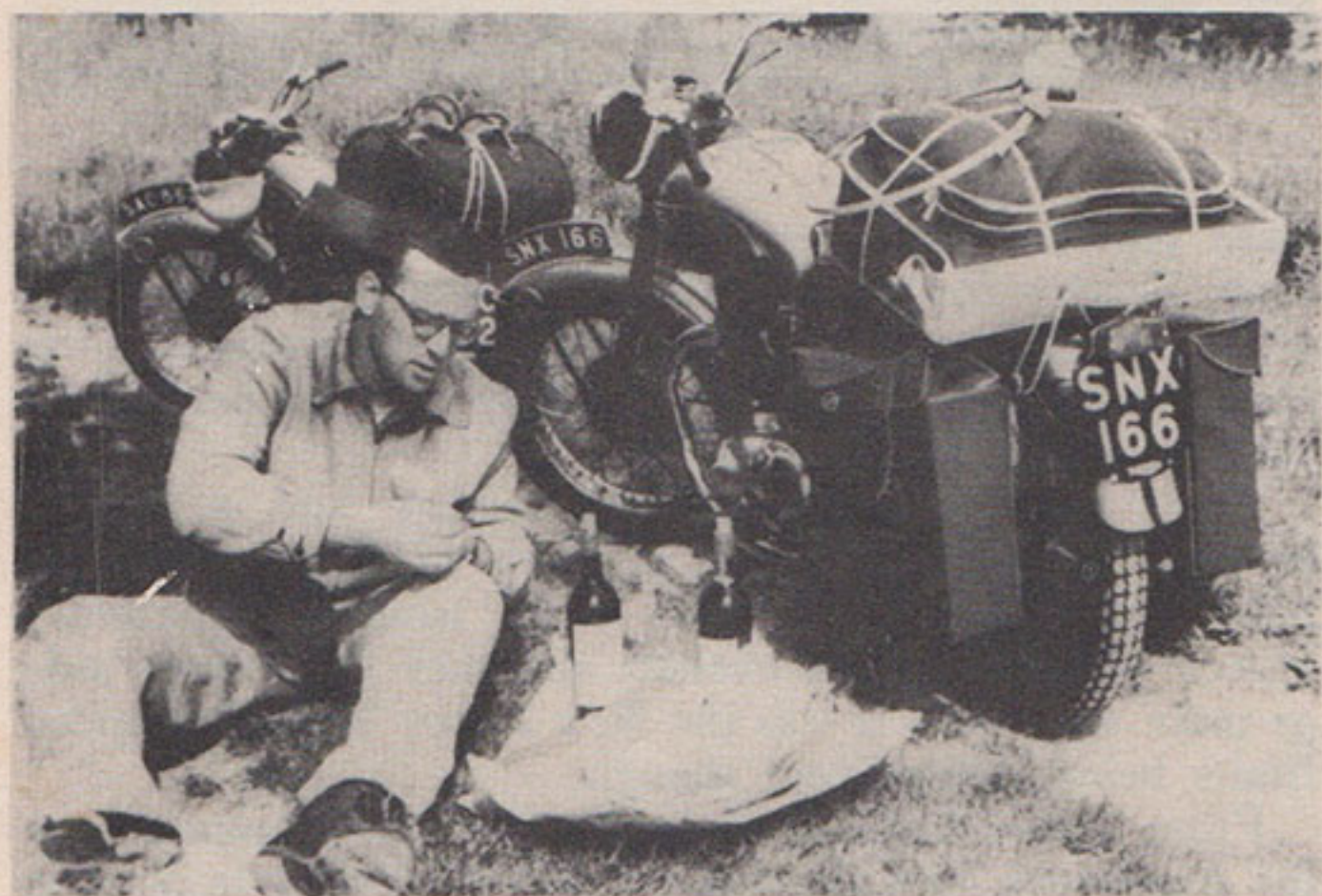
After spending the evening here, we headed north over roads running between the ranges of mountains of the magnificent Swiss Alps.

Between Bellinzona and Andermatt was one of the most exciting parts of the trip, leading us over the famed St. Gotthard pass, at 6,929 feet. During the winter the pass is snowbound, and even in June we encountered

huge banks of snow that hung precariously close to the fanatically twisting road that led to the top. The lake at the top of the pass was frozen and covered with snow, and icy winds were cutting through our summer clothing.

We weren't freezing alone though. Quite a few Germans in their "lederhosen", or leather shorts, stood around shivering, their legs turning shades of red and blue in the icy blasts. The descent was over extremely bad roads with a few poor excuses for guard rails separating us from a drop of over several hundred feet and sharp jagged rocks.

Soon, the beauty of the Alps was behind us and we found ourselves descending to the pleasant Lake of Lucerne and to the city, at 1,440 feet, on the northern shore.



The Author enjoys lunch.

We hadn't seen the last of ice and snow, nor had we seen the most impressive part of the Alps. Southwest of Lucerne lies the city of Interlaken, between the cold, rocky, and forbidding shores of Lake Brienz and the warmer and forested shores of Lake Thun. The city itself is strictly for the tourists, every other store selling carved cuckoo clocks. From here, though, Europe's highest railway leaves for the "Jungfrauoch", at 11,333 feet. The train passes through typically Swiss towns such as Zweilutschinen, Grindewald, and Wengen. During the trip the guide went to great pains to point out the "secret" airfield and "secret" ammunition depots carved out of solid rock. At the top the air was crisp and clear and there was an indescribable type of silence that was broken by the occasional low howling of the winds. The Aletsch glacier could be seen as a river of ice and snow overlooked by the famed Jungfrau, reaching to 13,642 feet, isolated and majestic. This was truly one of the outstanding memories of the trip.

Before we left Switzerland we very luckily ran into a young Swiss farmer in a little town called Niederbipp. He had been an exchange student in the "4-H" Farm Program and spoke excellent English, upper New York State-style. His father said that we could spend the night at their home as long as we weren't "American Gangsters". This was said in fun, we hoped. They were hospitable and treated us to some good wholesome Swiss meals. Needless to say, we hated to leave.

At Basle, we crossed the frontier into Germany and started north following the Rhine Valley. We took a small section of the renowned "Autobahn" from Durlach to Heidelberg, a distance of 36 miles. It is an excellent four-lane highway, almost comparable to the New Jersey Turnpike and the New York Thruway. Heidelberg, on the Neckar River, is an old college city, with the many expected student "drinking halls". The whole

city could be seen from the castle and tower, reached by a short cycle trip over winding, climbing roads.

From Wiesbaden, we took the road along the east shore of the Rhine River up to Bonn. The road is extremely poor but the scenery more than made up for it. The whole area is very industrialized though, and the air is filled with the soot particles from the factories and trains. Bonn is the capital of the West German Republic and is still dotted with grim reminders of the bomber raids of the last war. The war damage seemed worse in Cologne and worst of all in Aachen. From Aachen we crossed into Belgium.

No sooner had we entered Belgium when we were "gretted" by an autoist who accidentally sideswiped the "Cub", which was doing 45 mph. Both rider and cycle slid about 30 feet along the highway. Amazingly enough, damage was very slight. We stood on the highway for 3½ hours arguing whether he was going to pay us for the bent cycle, ripped pants, bloody legs, ripped pannier bag, and jangled nerves or whether we were to pay him for the scratch on his car. His lawyer came, and after threatening to drag him through every court in Belgium (of which we were totally incapable of doing), we were paid the equivalent of 10 U.S. dollars and two fairly good Belgian cigars. We straightened out the footrest, tied up the pannier bag, changed pants and were off again.

Mediocre roads took us through Liege and Brussels to the port city of Ostend. The ferry left early on a very clear morning and when we approached England there was an excellent view of the white cliffs of Dover.

After spending a few days in London, we took the "great north road" to Sheffield. This, by the way of explanation, is a two-lane highway which is heavily traveled by bicycles (usually three abreast), motorcycles, autos, and all sizes of trucks. It is well paved but very narrow and is typical of practically all of the British roads. As you might expect it is not only difficult to make good time on these roads but is a bit dangerous since passing is uppermost in everyone's mind (except the bicyclists).

We studied one month of Medicine at Sheffield University and found that quite a large number of the hospital beds were filled by the results of motorcycle accidents. We had worn crash helmets during our trip on the continent and were impressed greatly, at the hospital, with the large number of head injuries that occurred to cyclists who had not worn them. We roomed with a lively and friendly group of medical students who were ready to throw a party at the drop of a motorcycle stand.

During weekends we took trips into the surrounding



The Spanish Steps, Rome.

countryside of Yorkshire and Derbyshire. The roads were well paved and the scenery changed fairly rapidly. We went to Scarborough and Whitby, two seaside resorts fairly far from the usual tourist routes. The icy water restricted swimming to quick dips.

After leaving Sheffield we headed south through Stratford-on-Avon, to Salisbury. Another month of study was spent here with the usual weekend trips. We visited Cheddar (of Cheddar cheese fame), and saw quite a few old English manor houses. On "Bank Holiday" weekend, we decided to call on the family that had invited us to Bournemouth. They proved to be very hospitable and gave us an enjoyable weekend. There were two sons and a daughter, about our age, and we took them on an American style beach party, with grilled "sausages", soft drinks, and toasted marshmallows. We drove our cycles and their small Ford on the sand and spent part of the time digging the car out of deep holes that it dug for itself.



Venice, city of canals.

Finally the time for the trip drew to a close. Our cycles were export models and we drove them to the factory in Coventry, where they were crated and shipped back to the United States.

About 5,000 miles was put on each cycle with the "Cub" averaging slightly over 80 miles to the U. S. gallon and the "T-110" about 60 miles. There were practically no difficulties with the "T-110", but the "Cub" had developed clutch trouble in Ostend. This was fixed, under the guarantee, by the company in Coventry. Although such a trip as we took could be done on the "Cub", we'd definitely suggest a heavier cycle in the 350 cc or preferably 500 cc, or 650 cc class.

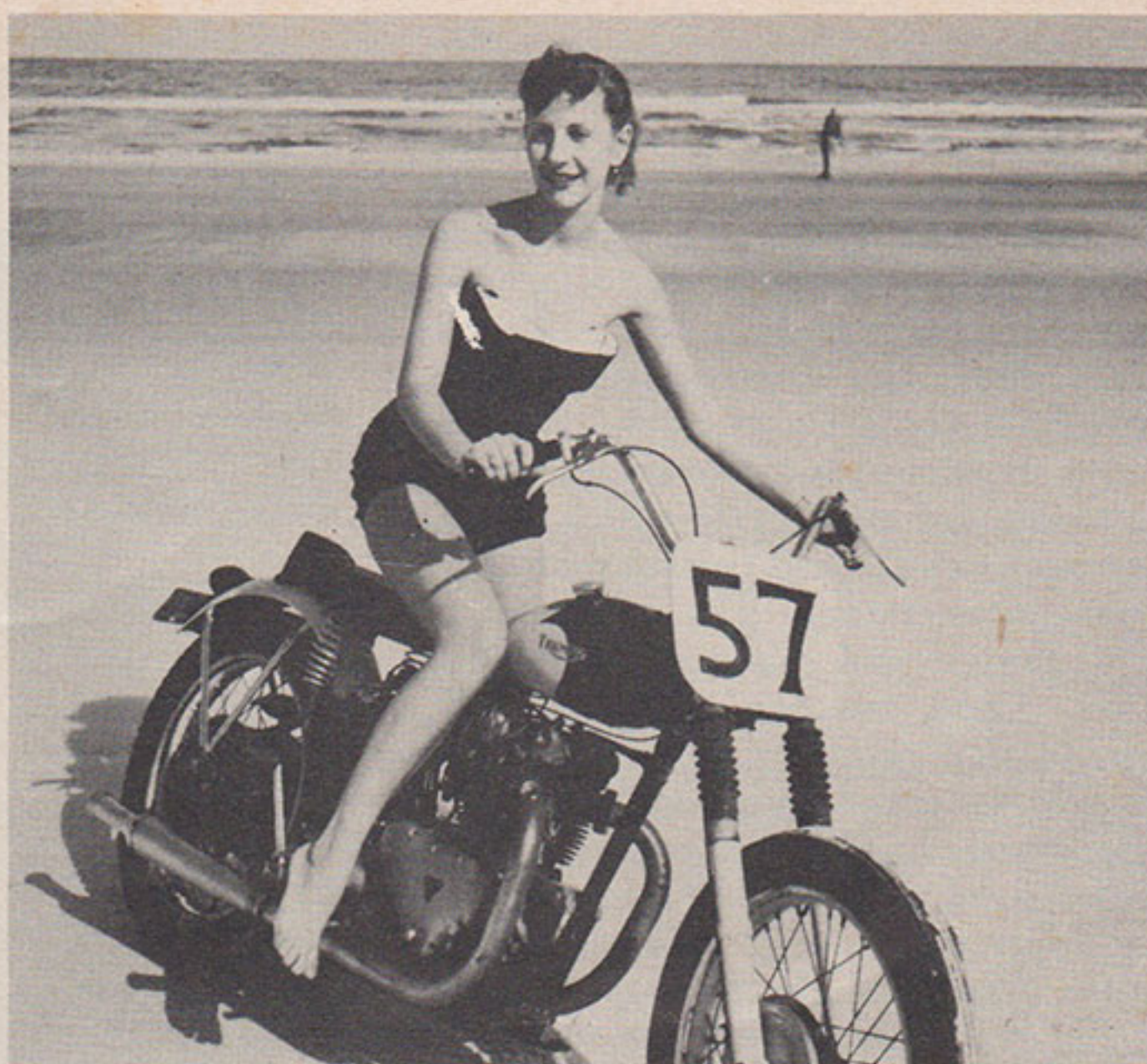
18TH ANNUAL SALES AND SERVICE SCHOOL

Johnson Motors, Inc., played host to 120 dealers attending the 18th annual sales and service school. Triumph and Ariel dealers and their representatives from the seventeen western states attended the school, which was held in Pasadena on January 28, 29, and 30th. Mr. Bill Johnson in his opening address welcomed the dealers to Pasadena and thanked them for making 1955 the greatest Triumph and Ariel sales year in the history of Johnson Motors, Inc.

Mr. Edward Turner, Managing director of the Triumph Engineering Company Ltd., of Coventry, England, was guest of honor. In an open discussion, Mr. Turner welcomed the views of many dealers regarding possible design changes which might lead to even greater sales of Triumph motorcycles.

The service school was conducted by Mr. Cal Makela, while Mr. Pete Coleman discussed with dealers the possibilities of increased profits in the sale of parts and accessories. Guest speakers included Mr. Norman Plummer and Mr. Dick Cesmet of Lucas Electrical Services, Mr. Peter Page, representing Lodge Spark Plug Co. and Mr. Ben Webb of Superior Accessory Company.

A social gathering and dinner on Sunday was preceded with a talk on salesmanship by Mr. C. C. "Moon" Mullin, followed by



The prettiest cyclist we've seen this year.

an excellent film "Presenting Your Sales Case Convincingly."

Lammy Lamoreaux of Lamoreaux and Milne, Triumph and Ariel dealer in Glendale, California was awarded a plaque for top Triumph salesman of 1955. Bob Rambo of Western Motorcycle Co. Portland, Oregon was the leader in Ariel sales for 1955. Ted Evans of Ted Evans Motorcycle Sales, Venice, California, won top honors for total combined sales of Triumph and Ariel motorcycles in 1955. On behalf of Johnson Motors, Inc., Mr. Bill Johnson, Mr. Wilbur Ceder and Mr. Ed. Brady wish to express their thanks to the many dealers who helped make this 18th meeting a success. Your attendance and suggestions will make 1956 another banner year.



E. T. Turner addresses the 140 dealers and mechanics on Wednesday.



Personal instruction on how to true a set of flywheels is given by Dave Ball of the Service Dept.

Although the Harley Davidson Motor Company of Milwaukee, Wisconsin manufactures luxury motorcycles, they also have an economy model in the Hummer. The Hummer's appearance bears a strong resemblance to the rest of the Harley Davidson line, with it's rangy look and comparatively long wheelbase for a lightweight.

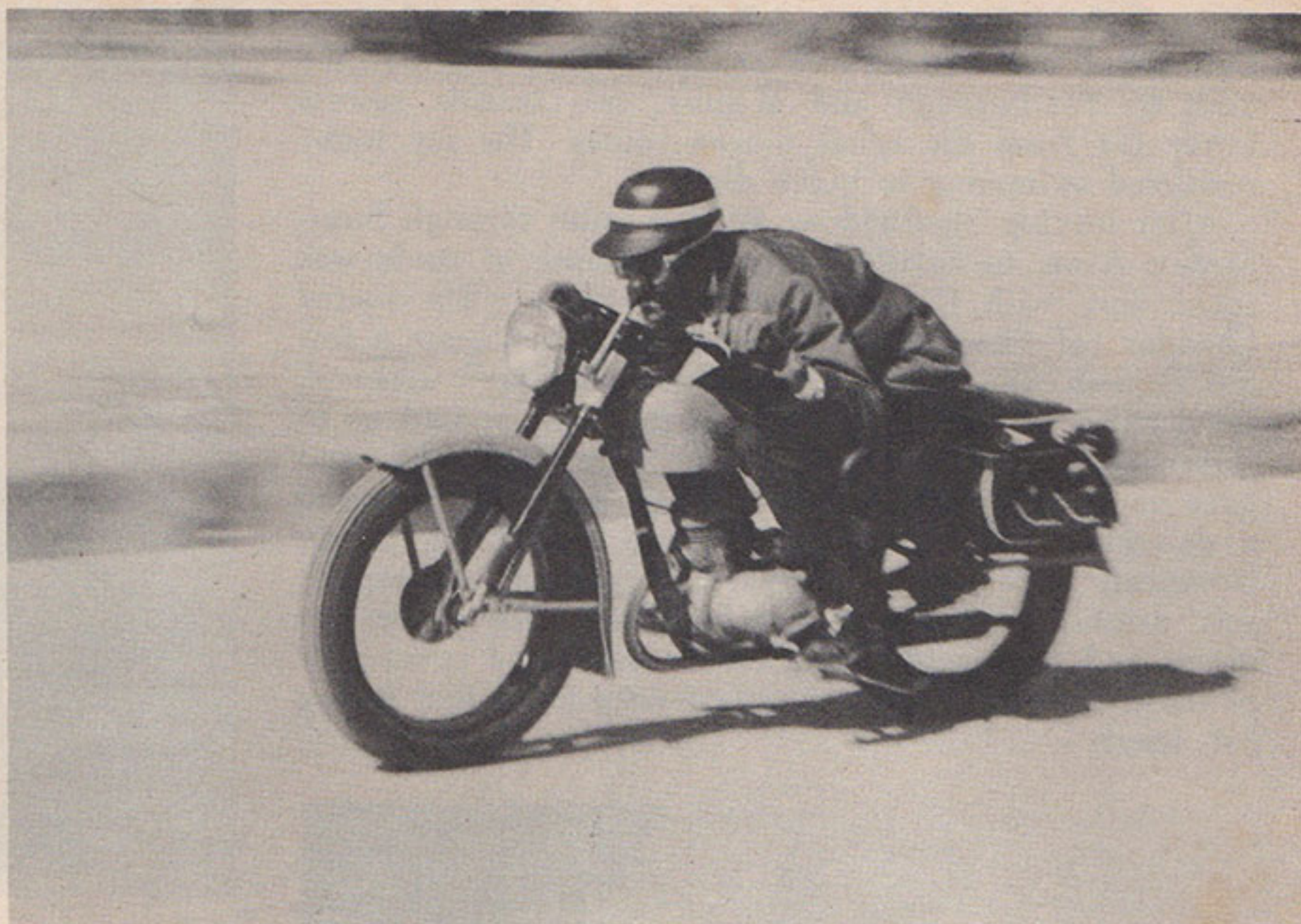
The Hummer is a two-cycle, single unit powered motorcycle which incorporates a three speed transmission and magneto-generator. The piston is dome-shaped and made of aluminum alloy. There are two pinned, 3/32" compression rings for the piston. Piston Pin is full-floating and is lock-ring retained. The connecting rod is drop forged with a needle assembly on the upper end and 12 roller bearings on the crank pin. On the sprocket side of the main shaft there are two ball bearing assemblies and on the magneto side there is one ball bearing assembly. Bore of the engine is 2.0625 and the stroke is 2.281 with a compression ratio of 6.6 to 1 and a capacity of 125 cc. The horsepower is 3 1/2.

The engine features a simple but efficient Tillotson carburetor with air filter and choke. Fuel line tubing is synthetic. Lighting and ignition on the Hummer is provided by a Bendix-Scintilla magneto-generator mounted on the main shaft of the engine. There is no storage battery. The magneto-generator is of the rotating magnet principle. Two coils are employed, one for ignition and one for lighting. Coils are held with clips and can be readily removed and replaced. The system is waterproof and the engine can be kept running as long as the spark plug is dry and the carburetor does not take in water.

Common to Harley-Davidson the gear shift is on the left and foot-operated. The brake is of course, operated with the right foot. The horn is a bulb type, which some people like and some don't. The hummer has a large comfortable seat common to the Harley-Davidson line.

The Hummer exhaust emits a subdued but healthy sound due to the large, well designed muffler. Standard equipment includes a sturdy luggage rack with a set of attractive saddlebags. An interesting feature is the gas filler cap, which incorporates a measuring cup for the addition of oil to the gasoline, making this operation extremely simple.

Starting the Hummer is simplicity itself. During the more than a week the bike was used by the CYCLE staff, the engine never failed to start by at least the second kick. The position of the controls and seating was satisfactory, although it might seem a little



Gib Black tries the Hummer for speed.

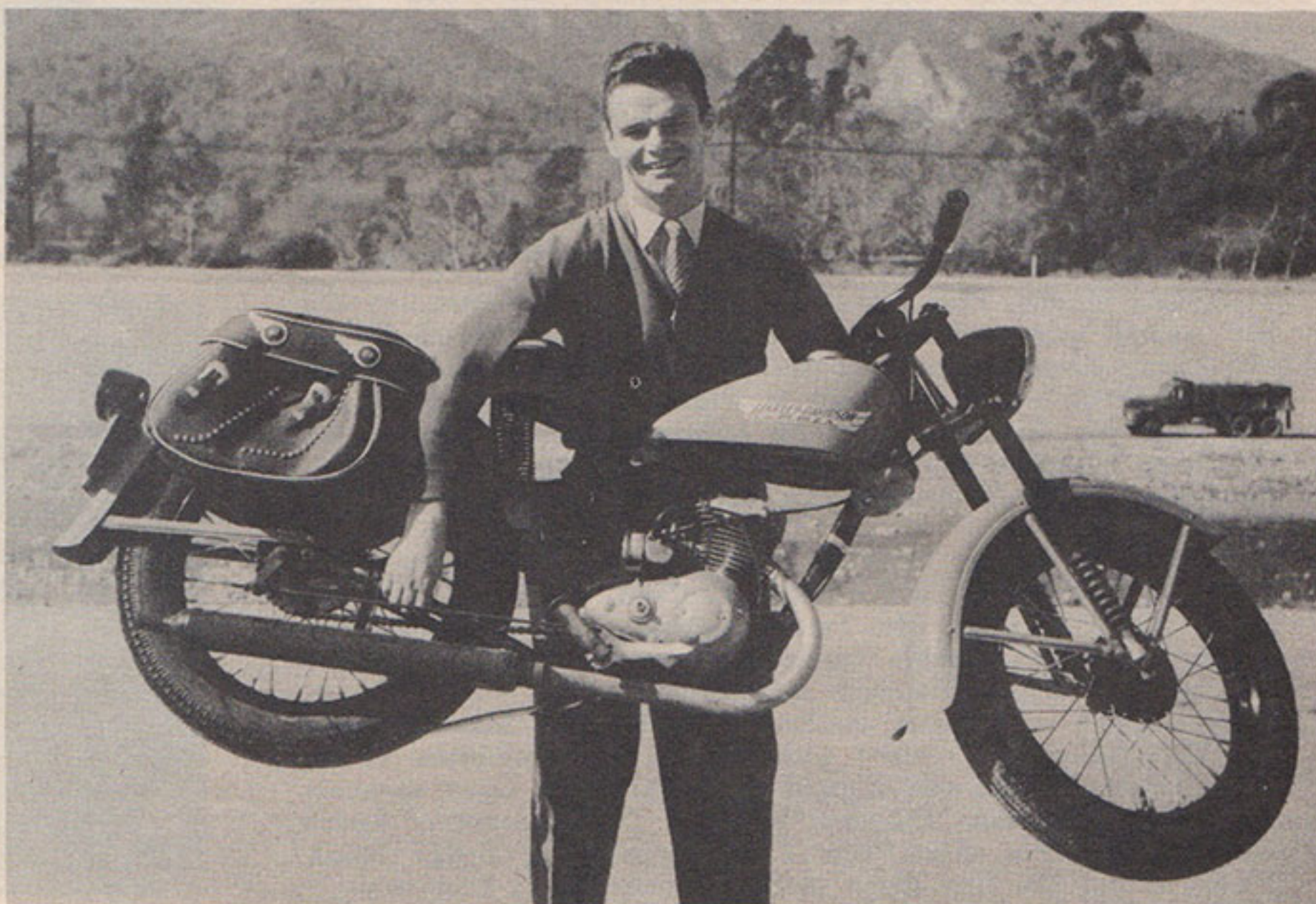
BROWN PHOTO

HARLEY-DAVIDSON

HUMMER

ROAD TEST

Road Test No. 71



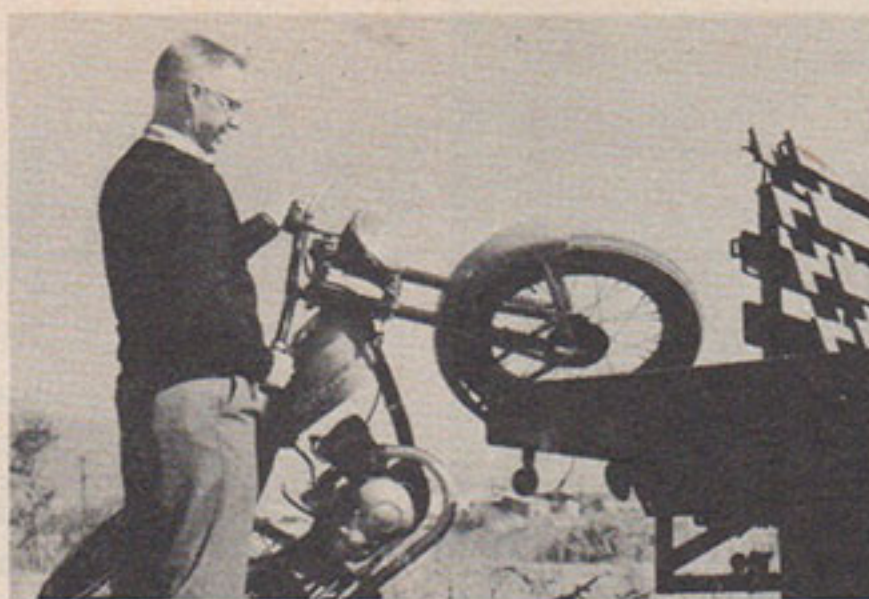
Rolf Lange lifts the Hummer with ease.

BLACK PHOTO

cramped to a rider used to a large machine. The suspension was adequate for most riding, but there was some bottoming of the Tele-Glide forks in the rough stuff. Incidentally, the Hummer does real well in the rough and control is positive at all times, due partially to the nice throttle action. Operation is by right twist grip and it has considerable range of movement, and constant pressure was not required to maintain throttle setting. The testers felt bottom gear which is 26.5 to 1, might advantageously be raised a little. The bike was ridden up a grade of approximately 30% in second gear without protest, while acceleration in low gear from a stop street, in heavy city traffic brought complaining honks from impatient motorists.

The Hummer in standard trim has no speedometer but a check by car speedometer indicated a top speed of 51 miles per hour can be reached. It reaches top speed rather quickly and vibration at speed was negligible. The brake, which is rear wheel only, is good; however, in the interests of safety CYCLE testers feel there should be a front brake. This is supplied as optional extra equipment. During several tests of the brake it was impossible to achieve a quick stop without locking the rear wheel. A brake distance check assisted by auto speedometer indicated a stopping distance of approximately 45 feet from 25 MPH.

Two color options are offered on



Hutchins loads Hummer.



Hutchins, Hummer and Water.

the Hummer—Atomic Blue and Pepper Red. The one supplied for test was blue and the finish is of high quality.

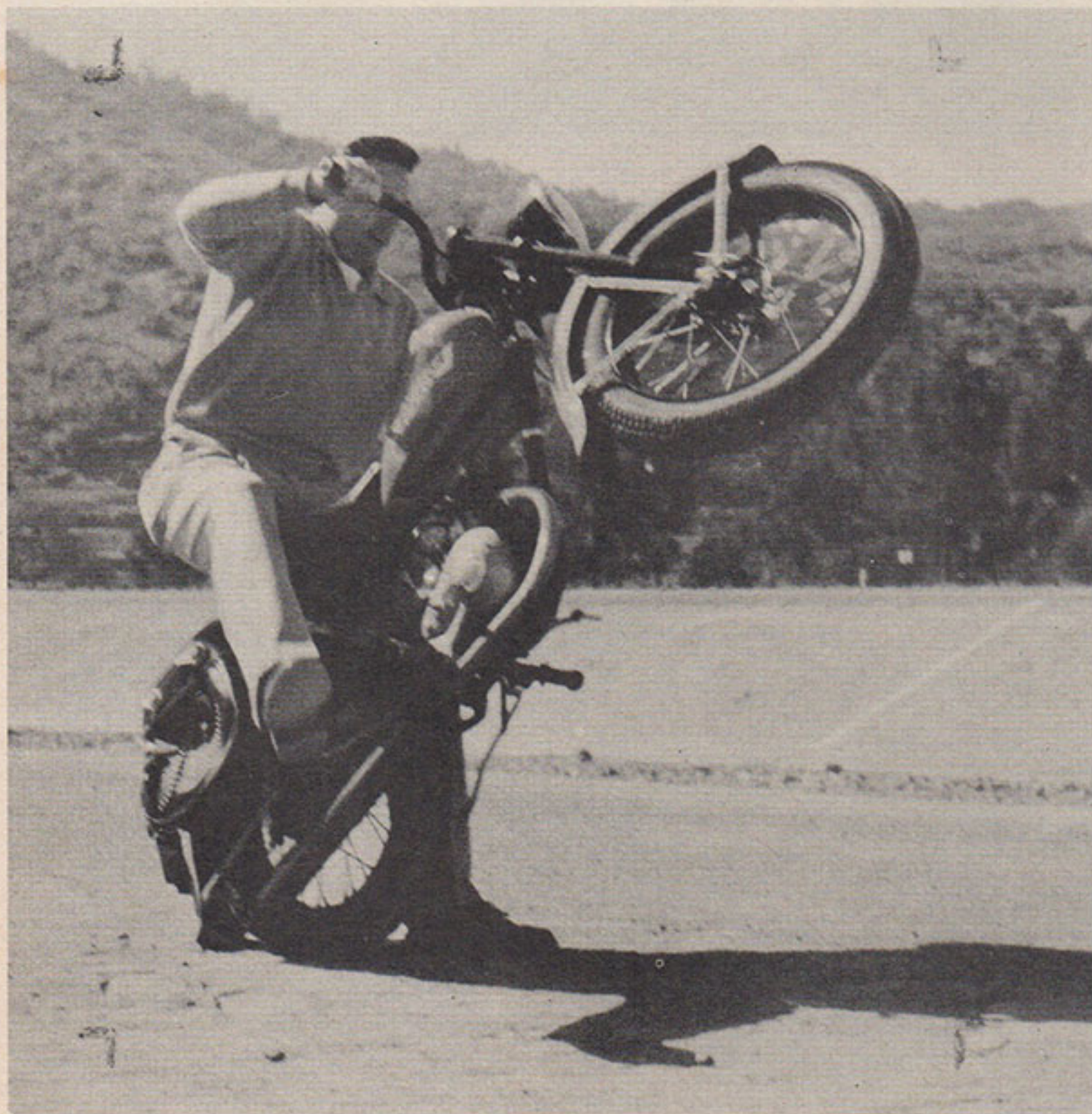
Some of the features that appealed to the test crew were: Kill button located on the bottom right front of the crankcase, easily accessible to the right foot. Also standard equipment are folding foot pegs.

The clutch, which is multiple-disc, operating in a oil bath is positive, but the change from low to second appeared a little heavy. The fenders on the Hummer the same as on the 165, large and flared at the ends, are 5 inches wide for effective protection in wet weather. The over-all length of the Hummer is 81 inches, with a saddle height of 28 and $\frac{3}{8}$ inches which should appeal to the smaller riders. Handlebars are finished in black enamel and the clutch lever is on the left handlebar. Grips are in black and are made of Neoprene.

Lighting is adequate for safety with a seven inch diameter, pre-focused, double-filament bulb. Control is from a three position switch on the left side of the front fork—dim, off, bright. The tail light is large and round in shape. It carries a large reflector area and intensifier button. Lens is plastic. Tail light is mounted on the license bracket and license is well illuminated.

Capacity of the fuel tank is $1\frac{7}{8}$ U.S. gallons and a check (including country and city riding) gave an average of 91 miles per gallon.

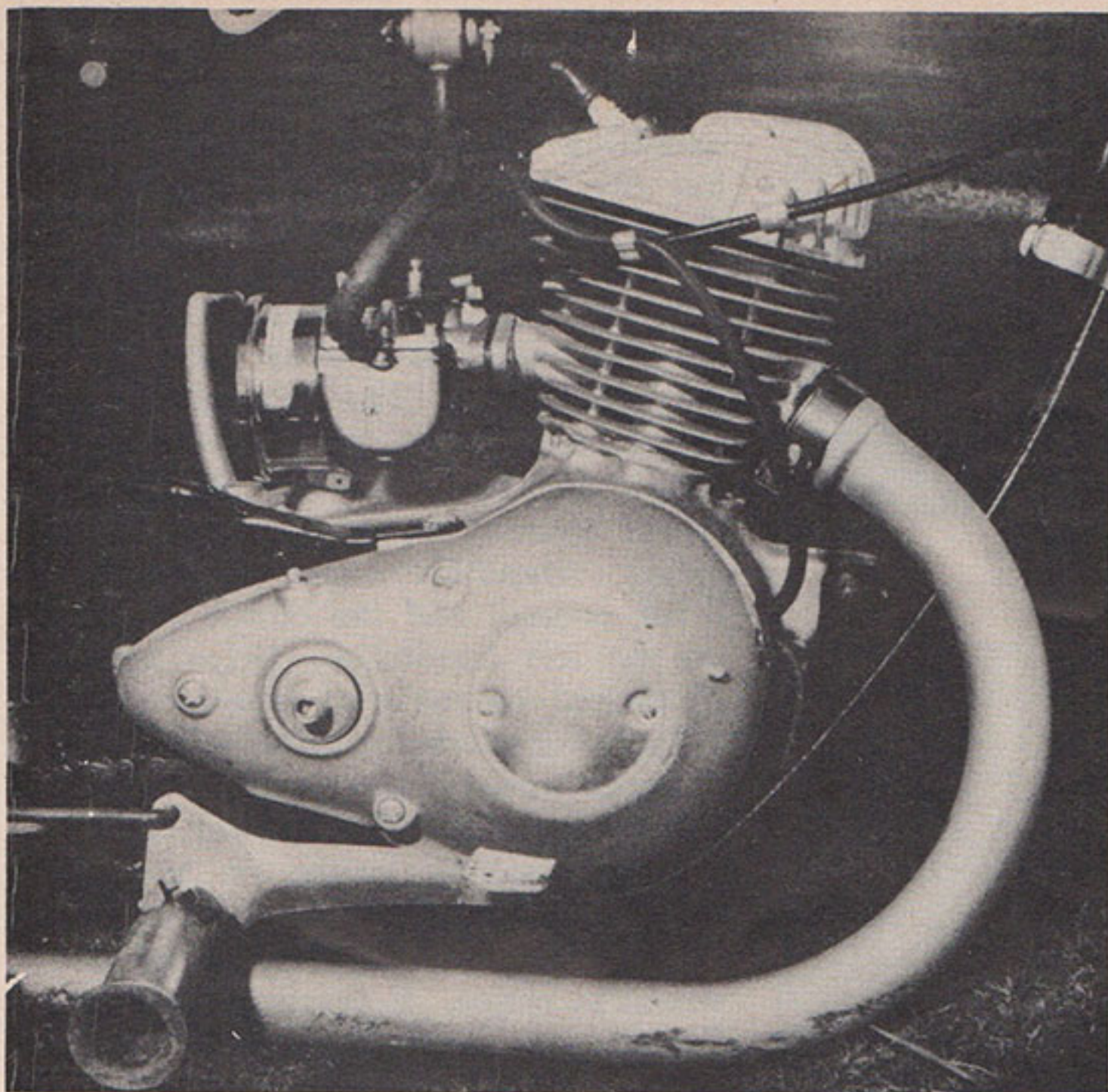
Summing up, it may be said that with the exception of certain minor items, some of which are a matter of personal taste, this is a lot of motorcycle for the price, and one that will be particularly attractive to the beginning rider. Economy is the important selling feature of this lowest priced model in the Harley-Davidson line. ●



Don Brown and a maneuver not for beginners.



Loading the Hummer after tests.



Hummer
power
plant.
Note
kill
button,
folding
foot pegs.

BLACK PHOTO

A fine sales promotional program occupies a prominent place in the Harley-Davidson endeavor. In the photograph below will be noticed a fine line of convenient and well-made accessories for use with the Harley-Davidson Hummer motorcycle. A strong, chrome plated crash bar heads the list. A well-designed and attractive windshield comes next. Push-on rubber coverings for the folding footpegs are also offered as an optional extra. A useful tool-kit is a handy extra for the rider who contemplates any long trips. Along this line Harley-Davidson also offers another necessary part of long-trip enthusiast's gear, a speedometer. Of course, the popular enamel and chrome polishes are also available. A novel spark plug holder is next, and there you have an array of accessories that is really complete, a real selling feature of this lightweight, low-priced cycle.

Specifications:

Engine: Harley-Davidson—single unit, 125cc., magneto-generator and transmission. Air-cooled, two-cycle, single cylinder. Aluminum head. Aluminum alloy dome-top piston. Aluminum crank-case. Aluminum alloy clutch-case cover and magneto-generator cover. Full-floating, lock-ring retained. 9/16" piston pin. Drop forged connecting rod with needle bearing on upper end. Main bearings of the ball type. Roller-type connecting rod bearing. Bore, 2.0625". Stroke, 2.281". Compression ratio 6.6 to 1. Approximately 3.5 brake horsepowers.

Electrical Equipment: Bendix-Scintilla magneto-ignition and lighting system. Maximum output of magneto-ignition coil, 20,000-volts. Maximum output of magneto-lighting coil, 3.2 amperes at 7-volts.

Carburetor: Tillotson. Built-in choke. Butterfly-type choke and throttle discs. 1/4" insulating block between cylinder flange and carburetor.

Lubrication: By oil in oil-gasoline mixture. Oil measuring cup attached to underside of tank cap.

Clutch: Multiple disc-type in oil bath. Left handlebar lever operated. Torque capacity 35 foot-pounds.

Transmission: Harley-Davidson 3-speed. Constant-mesh gears. Foot shift.

Gear Ratio:

First Gear	26.5 to 1
Second Gear	15.4 to 1
Third Gear	8.45 to 1

Frame: Single-loop, reinforced tubular steel. Drop forged steering head, ball bearing steering head bearings.

Forks: Telescopic spring fork, oil lubricated.

Brakes: Large, five-inch internal expanding rear wheel brake. Right foot operated.

Lighting Equipment: 7" prefocused dual beam control headlight. Large plastic-lense tail light.

Tires: 2-ply, 3.50" x 18". Standard makes.

Horn: Chrome-plated, manual operated air horn.

Muffler: Long and effective. Low restriction results in maximum power. Tubular type and design.

Saddle: American-style, foam rubber filled.

Weight: Approx. 174 lbs. dry.

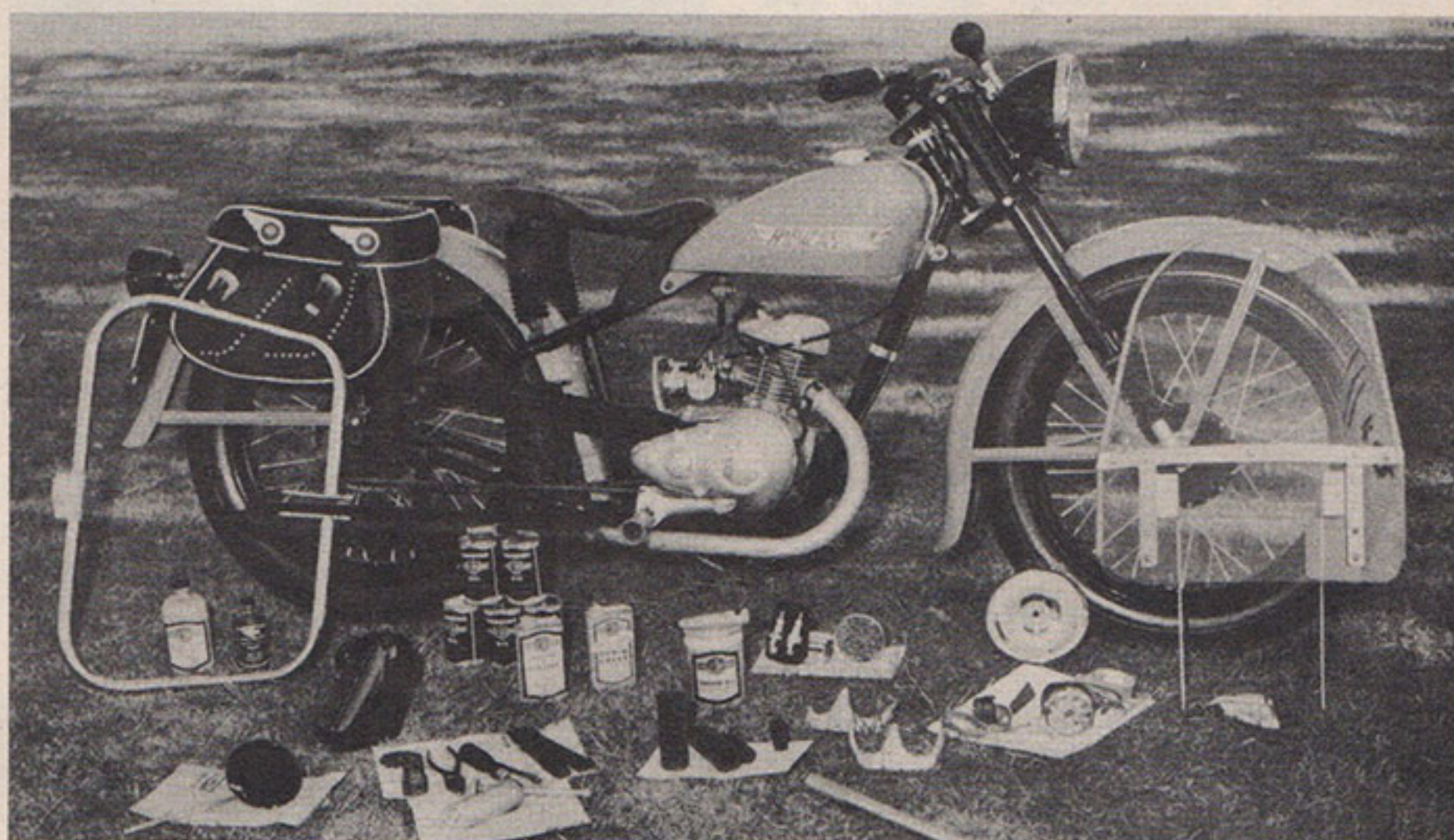
Gas Tank Capacity: 1 7/8 U.S. Gallons.

Overall Length: approx. 81".

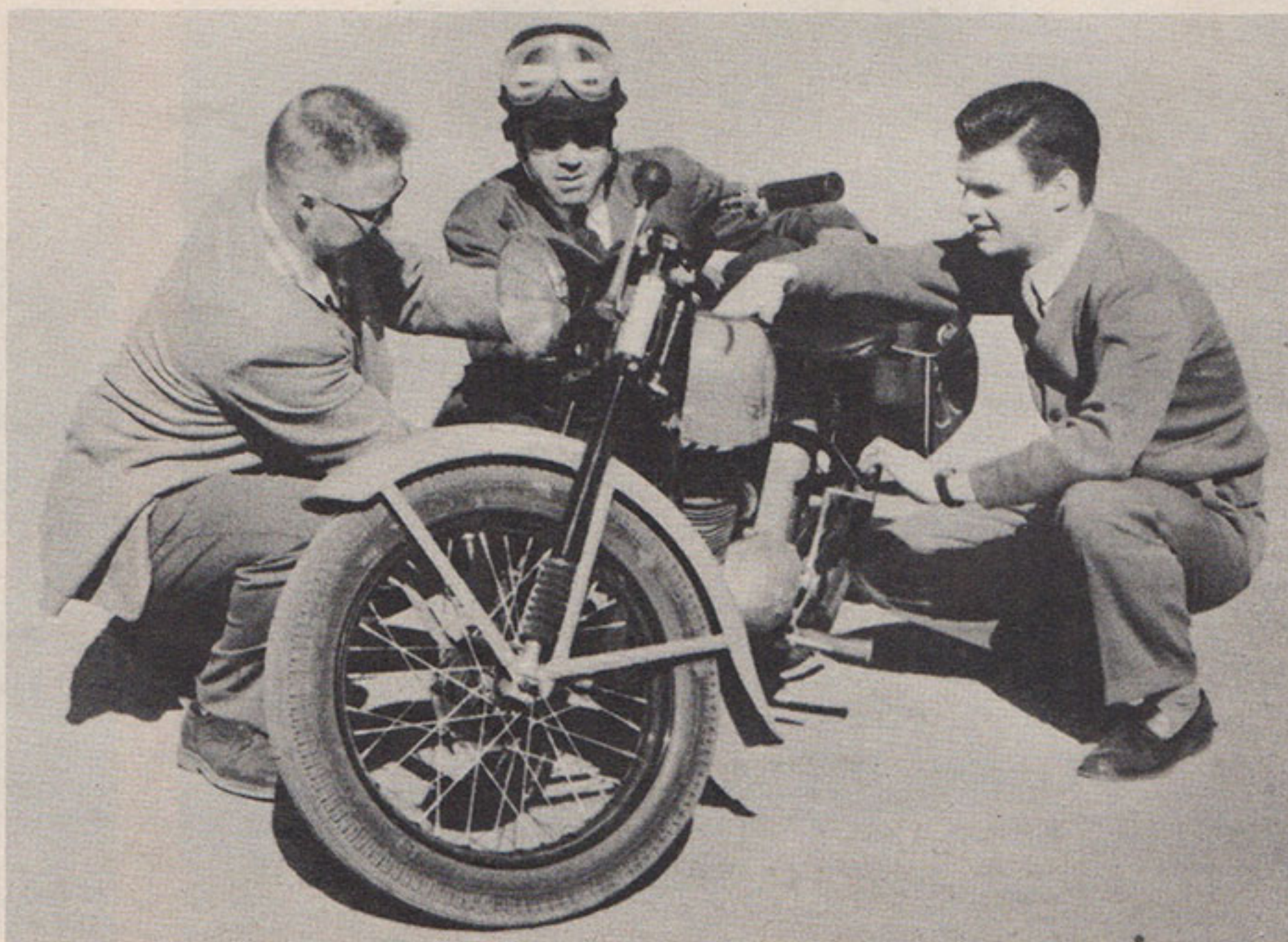
Seat height: 28 3/8".

Minimum road clearance: 4 3/8".

Wheelbase: Approx. 51.5".



BLACK PHOTO



Dick Hutchins, Gib Black and Rolf Lange examine Hummer.

BROWN PHOTO

MR. BRADSHAW

REPLIES

If the article in last month's issue stirred interest perhaps readers would like to read some of the criticisms evoked and Mr. Bradshaw's answers to them.

First, Mr. Bradshaw emphasizes that the development of the Omega engine is not a sudden inspiration, but rather the result of many years of effort. In the past six years Mr. Bradshaw has built and run four different engines, and each of the engines has shown an improvement over its predecessor. Bradshaw says it was a mathematical investigation into stresses that made him arrange the moving parts in the first place.

Motorcycle engines are today running in the neighborhood of 6,000 RPM. This represents 100 revs per second and the piston with its rings, piston pin and one-third of the connecting rod will weigh just over two lbs. The force necessary to accelerate this weight from the top of the stroke is 3,500 lbs. and 2800 lbs. are required to slow it down again at the bottom of the stroke. The load on the bearings, therefore, averages about $1\frac{1}{2}$ tons at every reversal (the mean horsepower thrust on the crankpin from the power of the explosion averages only 30 lbs. with a minimum of about 150 lbs. when accelerating in top gear.)

These loads necessary to starting and stopping the piston, are parasitic loads, for they do nothing to help in producing horsepower. Even on a single-cylinder 500 cc. engine they amount to some 6 tons per revolution, or 600 tons per second! And we are putting up with this load in order to obtain a crankpin torque of roughly 50 lbs. In modern engineering this is fantastic!

Bradshaw states that the basis of the Omega design lies in the provision of eight pistons faces to coincide with the eight reversals in the four-stroke cycle, so that the pistons are thrown to and fro by explosion pressure as it were, an action which takes away the heavy loads from the bearings. Few engineers can realize that the maximum load on any of the Omega bearings is about 10 lbs. per sq. in. and that they ought to last for at least twenty years, particularly when it is

remembered that most existing 500 cc. engines are loaded to 1,000 lbs. per sq. inch.

The designer considers criticisms concerning distortion of the cylinder as "pure nonsense." It should be noted that at any given moment compression has to be maintained over only about 3 in. (or less than one-quarter) of the cylinder circumference, since at the other three "between pistons" areas of the cylinder the inlet and/or exhaust ports are open and at these points gas pressures obviously do not matter. As a matter of fact the inlet and exhaust ports themselves are always open at one point or another and the flow of gases is thus continuous, just as in the case of the familiar gas turbine.

Similarly, Mr. Bradshaw considers talk about the need for extreme accuracy in workmanship is also nonsense if one has no heavy bearing loads. One critic referred to piston clearances of "less than two thousands." This small clearance in orthodox engines is to prevent the piston hammering from the rocking-over at each end of the stroke due to the angularity of the connecting-rod. The Omega unit has no rocking-over problem, nor has it any angular thrust from a connecting rod, and the designed piston clearance is between eight and ten thousands.

The designer also points out that the Omega abolishes the heavy piston frictional loads which arise from the angular swing of a normal connecting rod. The shank of this rod has weight and at 6,000 RPM it swings, pendulum fashion, 200 times per second—and it is brought to rest and reversed at the very moment when the piston is at its maximum velocity. This action alone causes a loss of 15 to 18% of the horsepower produced by the engine, and on the induction stroke the "pressure plus velocity" factor amounts to no less than 5,000,000 lb./ft. per min.; which is, of course, iniquitous. In the Omega unit, the maximum figure is 20,000 lb./ft. per min. at any part of the whole four-stroke cycle.

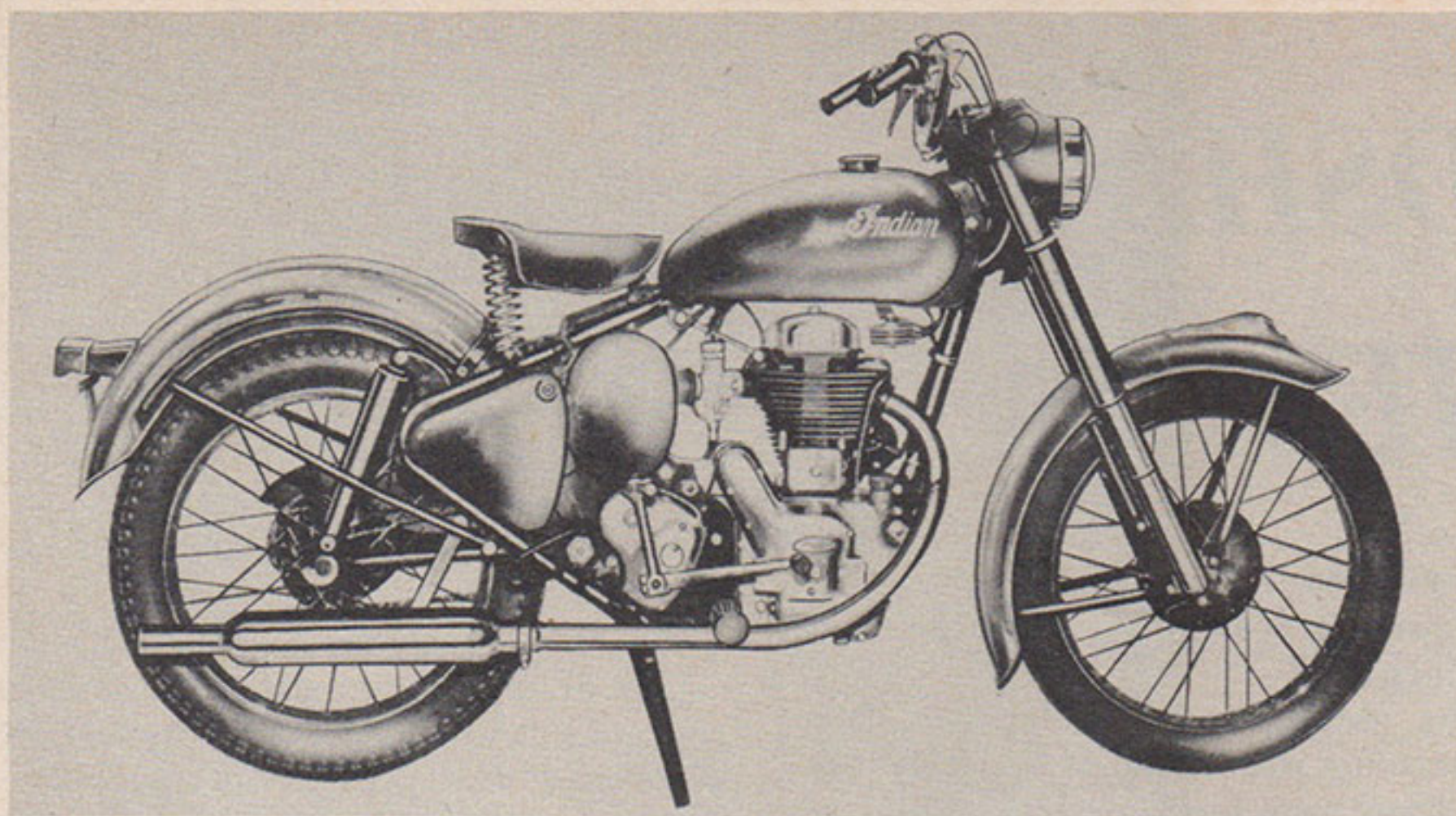
Bradshaw has provided some 24 inches of finned aluminum cylinder in the 500 cc. unit for cooling. He has also abolished the hot exhaust

valve and exhaust port and has got rid of pinking by a physical change in the shape of the combustion chambers. We all know that pinking or pre-ignition is caused by a pocketing of end gas remote from the spark plug. The spark ignites the mixture and from photographs taken at the rate of 40,000 per second, the flame is seen to grow like a balloon. The pressure rises and the heat increase and a small pocket of gas farthest from the spark plug ignites spontaneously to produce the knocking. The pistons of the Omega unit draw away from one another on the explosion stroke and the excessive pressure on the "end gas" is thus relieved before it can cause detonation.

Another point introduced by Mr. Bradshaw concerns the subject of pistons. It is well known that in orthodox engines the explosion pressure thrusts the top piston ring hard on to its lower "land" and then the con-rod thrusts the piston over to the other side of the cylinder bore—which is the cause of the oval wear in the cylinder. In the Omega the gas pressure merely holds the piston ring, and it is the ring which locates the piston in the cylinder with no side-thrust of any kind.

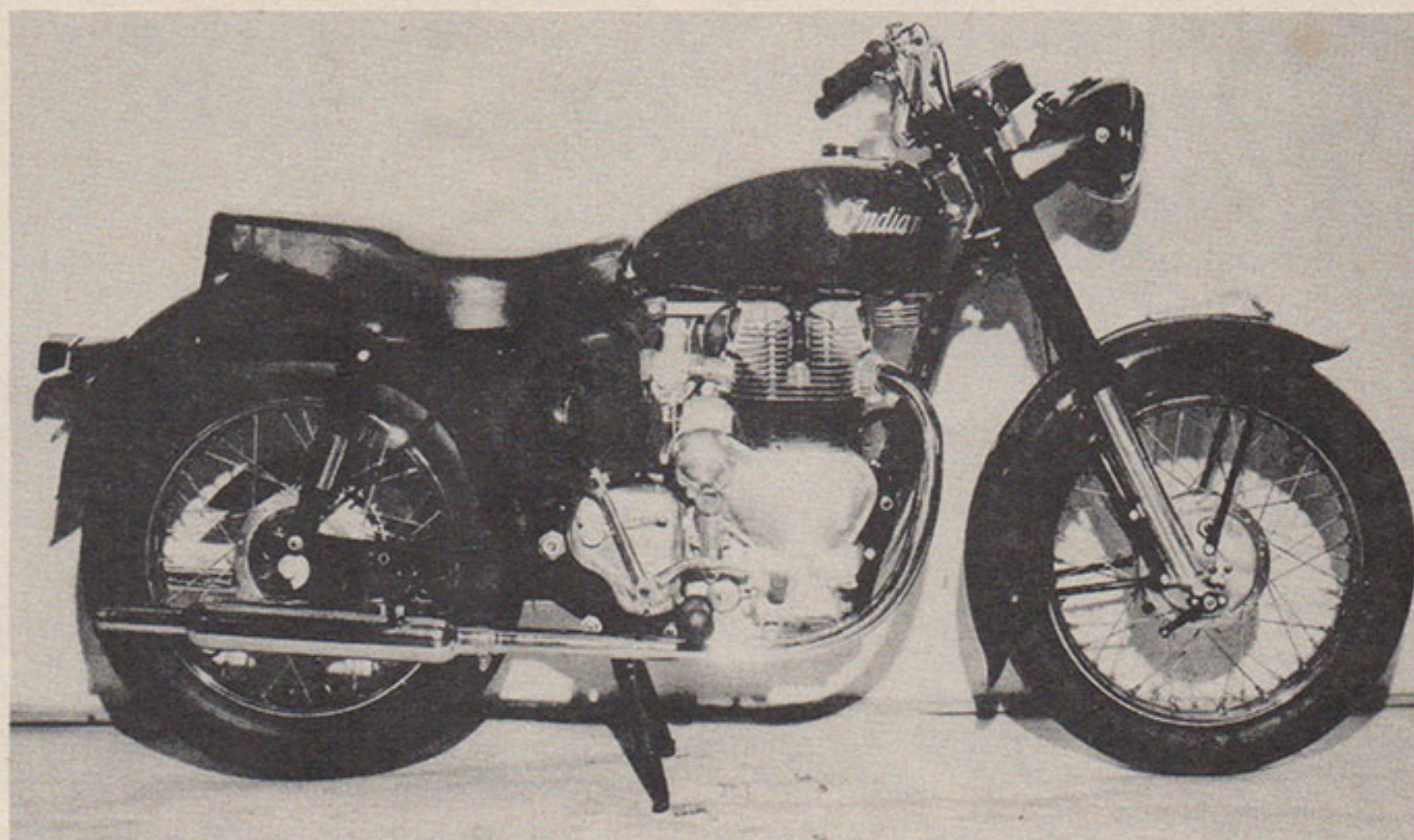
The Omega unit has been investigated by experts on gas turbines for cars. They are perturbed, and not without reason. The gas turbine draws in a charge at relatively low compression (to avoid burning the blades) and this burning charge subsequently impinges against a turbine wheel. In the Omega a charge is taken through a port on one side of the cylinder and is nipped between two pistons at a compression of about 8 to 1. The charge is fired, the pistons are "kicked" apart, a port opens at the other side of the cylinder and the gas has gone. Why, then, add the highly expensive turbine wheel when it is quite unnecessary? Incidentally, the rotary and extractor "Catherine-wheel" exhaust system embodied in the "Omega" reduces pumping losses by 5% and gives a dead-silent exhaust gas, the burned gas "falling into the air" without velocity.

Summing up, Bradshaw feels that the turbo-prop aircraft engine will be obsolete within a year because in commercial aviation "pay load" is of paramount importance and an airplane equipped with a suitable Omega unit could fly the Atlantic and back without refueling. This unit, power for power, is smaller in diameter, lighter in weight and has less head-resistance than the gas turbine. Moreover it can run on diesel oil with better than diesel economy. ★



1956 Indian Fire Arrow.

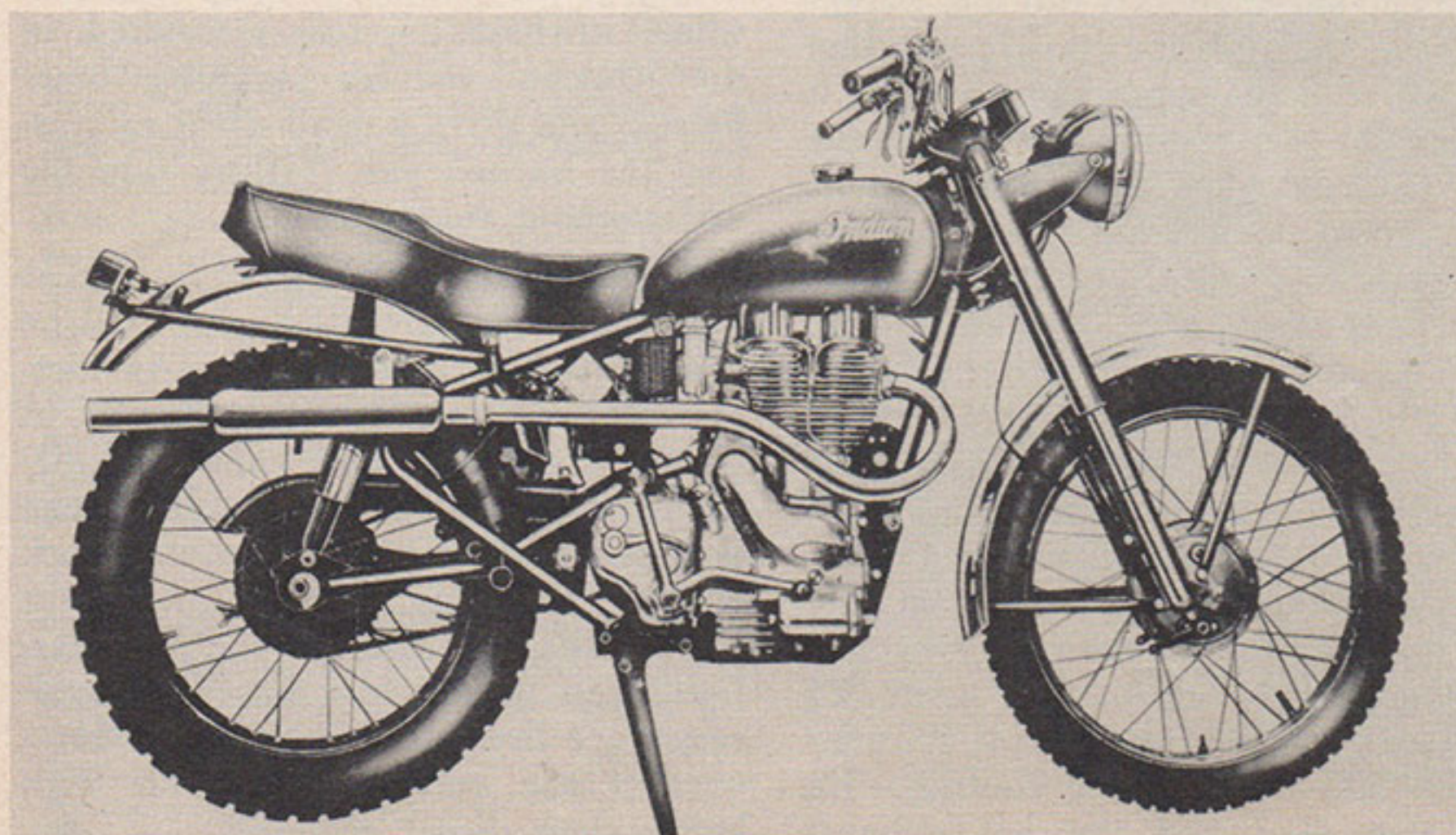
THE NEW



1956 Indian Trailblazer.

INDIANS

1956 Indian Woodsman.



Al West, Indian's Vice President in charge of sales, states that the four new improved Indians are designed to give the utmost in performance and reliability, with a price tag that should prove appealing to every motorcycle enthusiast.

The largest of the new Indian models is the Trailblazer, a 42½ cu. inch engine, set into a swinging arm constructed frame and telescopic forks. New features are: new combination stop and tail light, new primary cover, new foot pegs, new combination horn and dimmer switch, full width rear polished hub and quick detachable sprocket. Amal "monobloc" carburetor is standard equipment, along with an air filter. Frame and forks are finished in black with the rest of the bike in the popular Indian Red.

Next in line is the Tomahawk with improved dry sump oiling system, improved neutral finder, new Klinger insert type clutch, new swinging arm frame, monobloc carburetor, magneto ignition, combination horn and dimmer switch, AC electrical system and new full width polished rear hub with detachable sprocket.

The Woodsman, popular enduro machine is a rugged 30.50 cu. in. scrambler with improved front fork action, improved valve seating, neutral finder, Monobloc carburetor, Klinger insert type clutch. Stewart Warner illuminated speedometer with tripmeter in

10ths of a mile, new timing cover, new quick detachable headlight and combination tail and stop light.

Last but not least is the 250 cc. Indian Arrow, with a four cycle engine in a full sized frame. Features are: Improved Klinger insert type clutch, improved gear box, improved primary chain adjuster, new combination stop and tail light, Monobloc carburetor, combination horn and dimmer switch and the distinctive new Indian front fender insignia.

Complete specifications on these machines are as follows:

"TRAILBLAZER 700"

COMPLETE SPECIFICATIONS

Rugged constructed swinging-arm type frame with chrome molybdenum tubing with hydraulic damping to cushion against all road shock. Equipped with center stand.

A 692 c.c. Overhead Valve Vertical Twin cylinder. Separate aluminum alloy cylinder heads fitted on deep-finned cylinders. Light alloy connecting rods. Improved massive one piece crankshaft, chain driven high-level camshafts. Improved dry sump lubrication incorporating large capacity oil filter. High compression pistons developing 42½ h.p. Compression ration 7.25 to 1.

Four speed foot operated gearbox incorporating Improved positive neutral finder, multi-plate Klinger type clutch, and folding kickstarter pedal.

Primary chain, Duplex chain, enclosed in oil bath case. Final drive chain $\frac{5}{8}$ " protected by chainguard.

AMAL "Monobloc" carburetor. A radical departure from long accepted design is the "built-in" float chamber, closed by a sealed side plate. In it is a hinged float and a nylon needle.

Improved self-lubricating, hydraulically controlled teledraulic forks.

Smartly designed front and rear fenders.

Dual seat supplied as standard equipment.

4.8 gallons fuel tank with INDIAN decals mounted on the sides. 4.1 pints oil tank incorporated in the crankcase.

Dual 6" brakes fitted to the front wheel with compensating adjuster on handlebars. Foot operated rear wheel brake, rims chrome plated, Dunlop 4.00 x 18 rear tire and 3.50 x 19 front tire. Patented cushion drive incorporated in the New full width polished rear hub. Polished front wheel hub. Detachable rear wheel Sprocket.

Lucas automatic voltage control. Headlamp, Improved magneto ignition, A.C. lighting equipment, New combination stop and rear tail light, electric horn, New combination horn button and dimmer switch, and cut-out button on handlebar.

Chrome plated Western type handlebars fitted as standard equipment with steering damper.

Distinctive INDIAN red enamel on gas tank, fenders, tool box and chainguard. Black enamel fork and frame. Exhaust system, handlebars, control levers and many other parts heavily chromium plated.

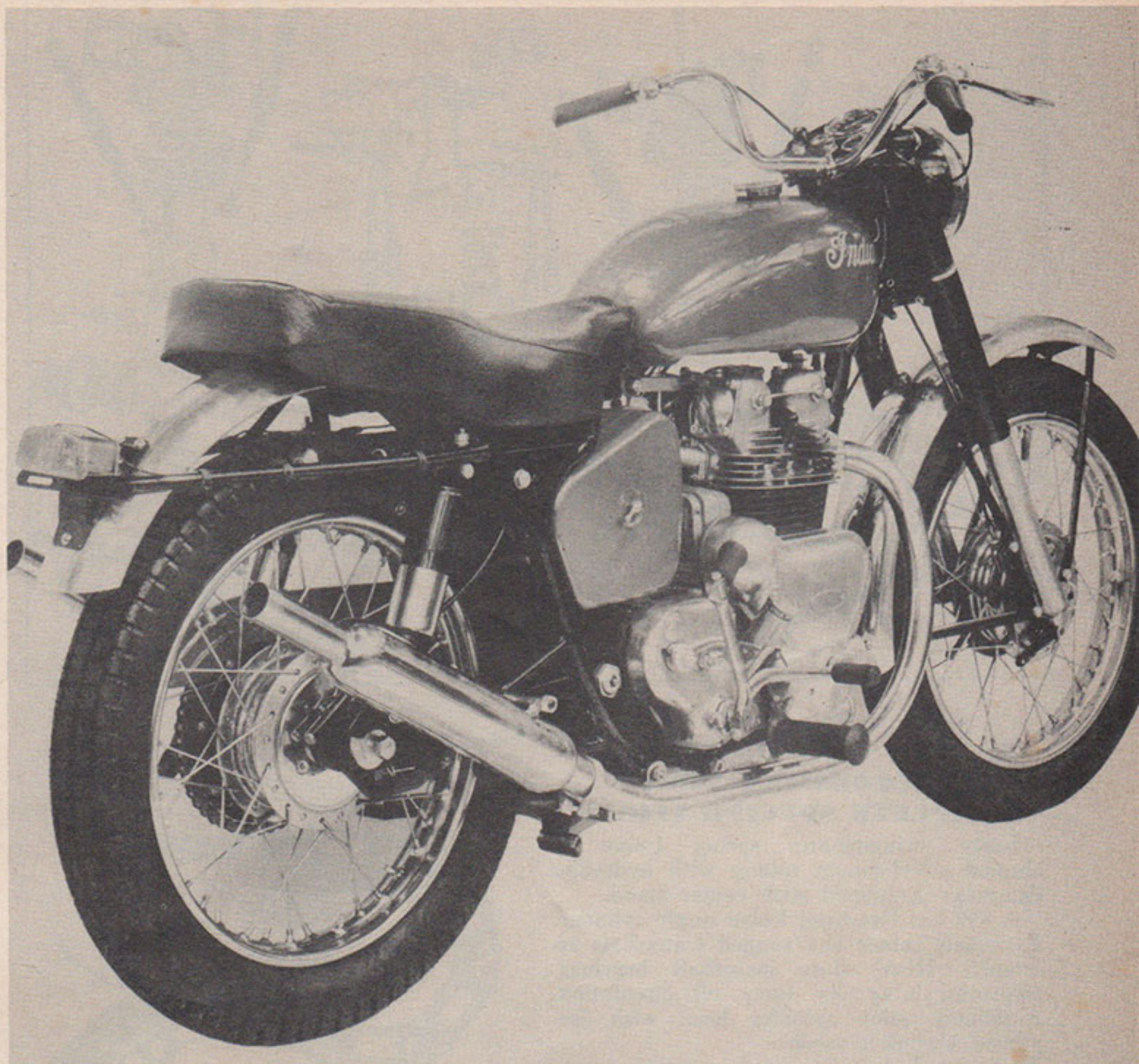
Special INDIAN "Steward-Warner" illuminated speedometer, double saddle, footrest, footrest rubbers with INDIAN imprint, tool kit, KLG plugs, instruction book, trip-meter. New front fender insignia.

"TOMAHAWK 500"

COMPLETE SPECIFICATIONS

New lusty swinging-arm spring frame of chrome molybdenum tubing with hydraulic damping. Equipped with center stand.

A 496 c.c. Overhead Valve Vertical Twin cylinder. Separate alloy cylinder heads fitted on deep-finned cylinders. Light alloy connecting rods. Improved massive one piece crankshaft, chain-driven high-level crankshafts. Improved dry sump lubrication



1956 Indian Tomahawk.

incorporating large capacity oil filter. Compression ratio 7.5 to 1.

Four speed foot operated gearbox incorporating Improved positive neutral finder. Multi-plate Klinger type clutch. Folding kickstarter pedal.

Primary drive by Duplex chain enclosed in oil bath case. Final drive chain $\frac{5}{8}$ " protected by chainguard.

New AMAL "Monobloc" carburetor fitted with air filter.

Improved self-lubricating, hydraulically

controlled teledraulic forks fitted into a smartly designed "Casquette" fork head.

Polished aluminum front and rear fenders styled for the Sports Rider.

Dual seat supplied as standard equipment.

3.9 gallons fuel tank capacity with INDIAN decals mounted on sides. 4.1 pints oil tank capacity incorporated in crankcase.

Dual 6" brakes fitted to front wheel with compensating adjuster on handlebars. Foot operated rear wheel brake, rims chrome plated, Dunlop 350 x 19" rear and 325 x 19" front tires, patented cushion drive incorporated into the New full width polished rear hub. Polished front wheel hub. Detachable rear wheel sprocket.

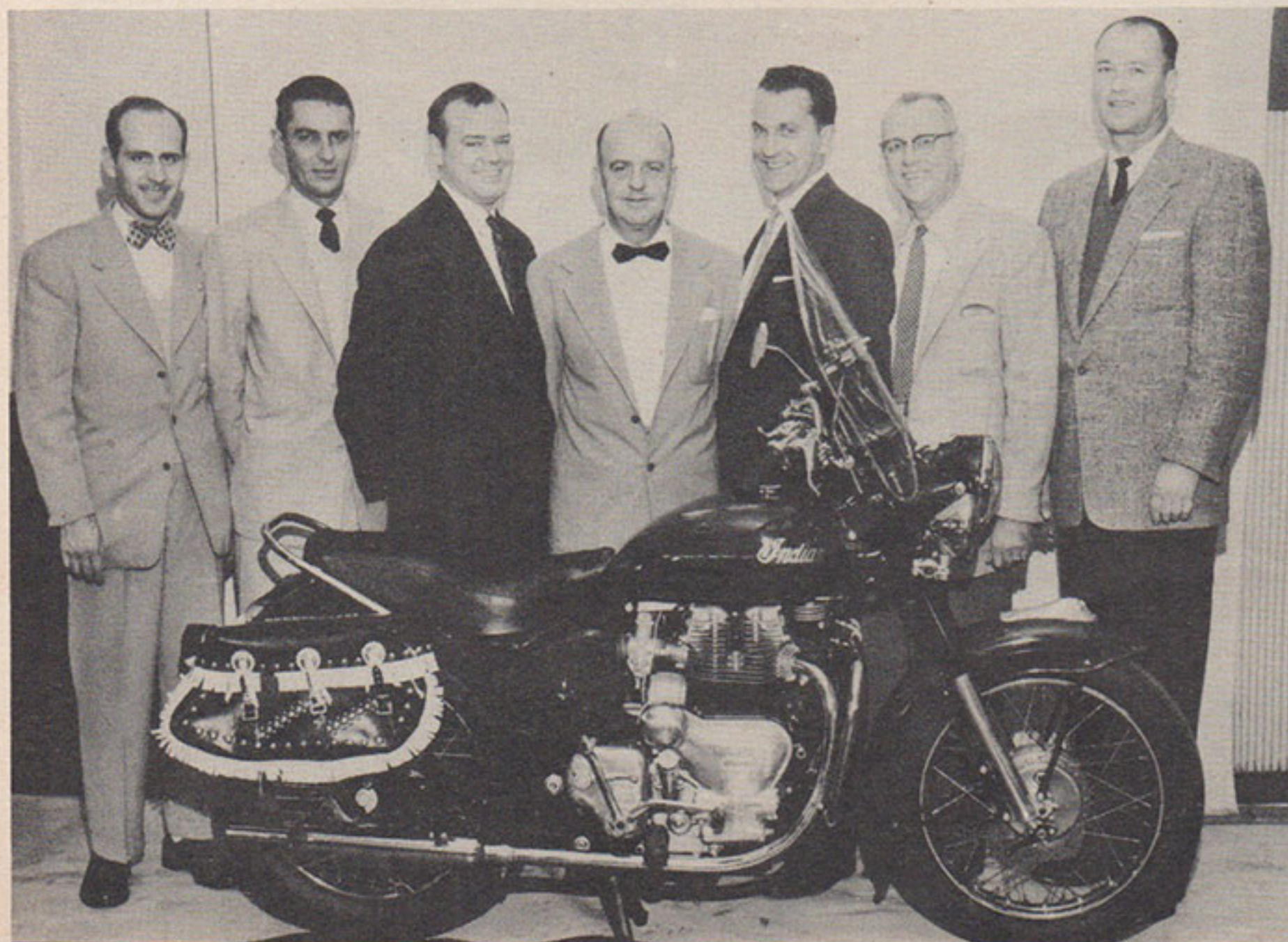
Lucas automatic voltage control, magneto ignition, A. C. lighting equipment, electrical horn, two pilot lights, ammeter and light switch in "Casquette" fork head, Improved combination stop and tail light, New combination dimmer switch and horn button, cut-out button on handlebar.

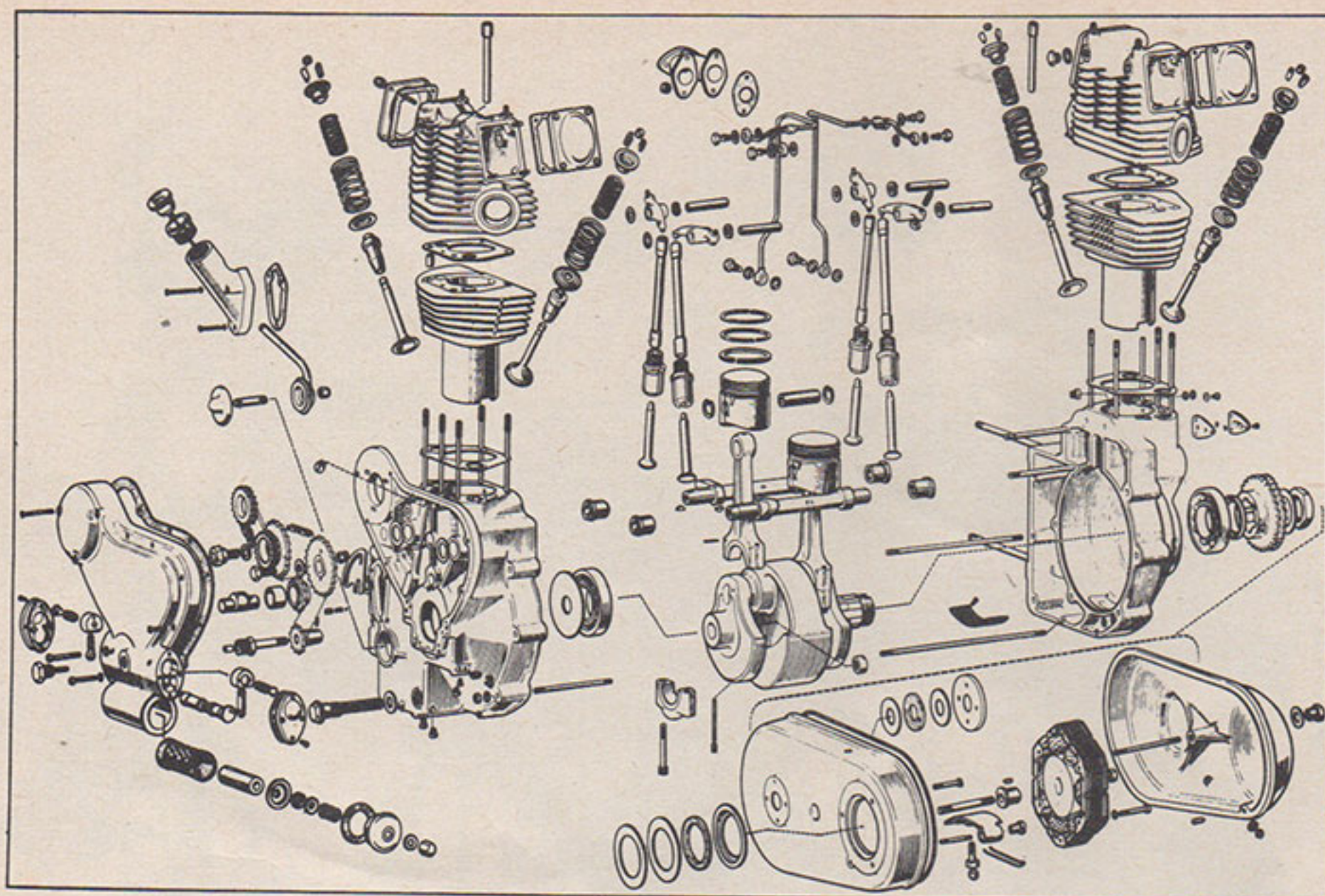
Chrome plated Western type handlebars fitted as standard equipment.

Distinctive INDIAN red enamel on gas tank, tool boxes and air filter. Polished aluminum fenders. Black enamel fork and frame. Exhaust system, handlebars, control levers and many other parts heavily chromium plated.

Smith's chronometric illuminated speedometer, incorporated tripmeter, dual saddle, tool kit, KLG plugs, upswept system, instruction book. Footrest rubbers with INDIAN imprint. New timing case cover.

Top Field Representatives have preview of the 1956 and 1957 Trail-Blazer.





Exploded view of the 1956 Indian Trailblazer engine.

"WOODSMAN 500"

COMPLETE SPECIFICATIONS

Lusty swinging-arm spring frame of chrome molybdenum tubing with hydraulic damping. Equipped with center stand.

A 499 c.c. Overhead Valve single cylinder. Extremely robust and rugged crankshaft assembly. Heavy duty mainshaft bearings. Improved large dry sump oil circulation. Aluminum alloy cylinder head with Improved shrunk-in-valve.

Four speed foot operated gearbox incorporating Improved positive neutral finder. Multi-plate Glinger type clutch and folding kickstarter pedal. Gear ratio 6.06, 7.9, 10.1, 16.8, to 1.

Primary drive by Duplex $\frac{3}{8}$ " pitch running in oil. Final drive by $\frac{5}{8}$ " pitch chain protected by a chainguard.

New Amaal "Monobloc" carburetor fitted with air filter.

Improved heavy duty self-lubricating hydraulically controlled teledraulic forks.

Competition type polished aluminum front and rear fenders.

Dual saddle supplied as standard equipment.

2.4 gallons capacity fuel tank with Indian decals mounted on the sides. 4.1 pints capacity oil tank incorporated in crankcase.

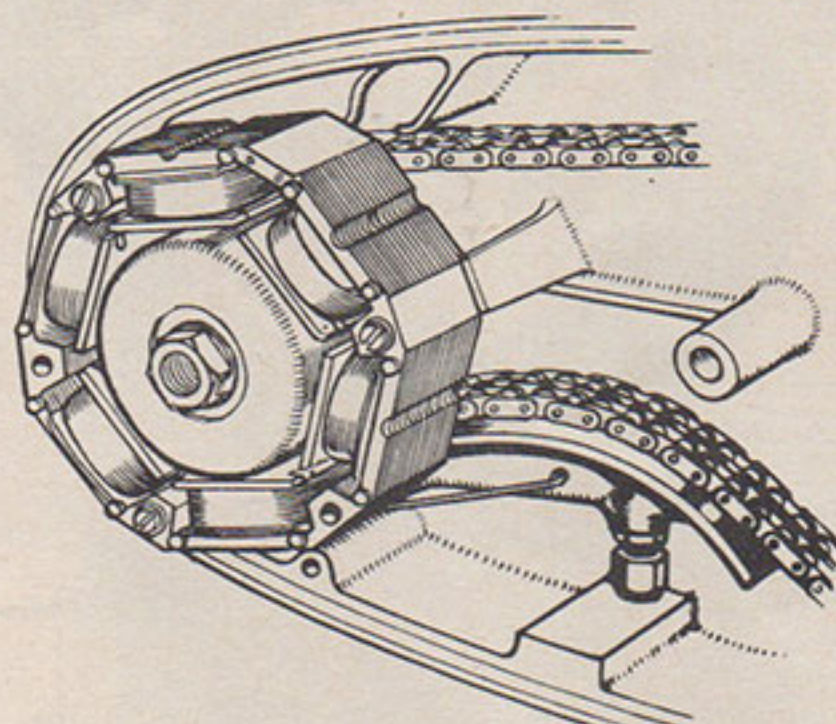
Dual 6" brakes fitted to front wheel with compensating adjuster on handlebars, foot operated rear wheel brake, chrome plated rims. Front 300 x 21" Dunlop Sports tire with one security bolt. Rear 400 x 19" Dunlop Sports tire with two security bolts. Patented cushion drive incorporated in rear wheel with detachable sprocket. Polished front wheel hub.

Lucas 60 Watt output mag-dyno, automatic voltage control, electric horn, quick detachable headlight unit, Improved combination stop and tail light.

Chrome plated Western type handlebars fitted as standard equipment with steering damper.

Distinctive Indian red enamel on gas tank and chainguard. Black enamel on fork and frame parts. Exhaust system, handlebars, control levers and many other parts heavily chromium plated.

New Indian "Steward-Warner" speedometer with tripmeter incorporated, double saddle, tool kit, KLG plug, instruction book, engine undershield high competition type exhaust pipe and muffler. Folding foot pegs. New timing cover.



A.C. Electrical set-up, standard equipment on the Tomahawk and Trailblazer.

"FIRE ARROW 250"

COMPLETE SPECIFICATIONS

Swinging-arm spring frame built of chrome molybdenum tubing for maximum strength and soft springing to protect the rider from road shock. Equipped with center stand.

A 248 c.c. Overhead Valve single cylinder. Deep-finned cylinder allows adequate cooling. Cylinders of close grained, high grade cast iron. Aluminum crankcase. Compression ratio 6.5 to 1,—4 cycle engine.

Four speed foot operated gearbox. Improved multi-plate Klinger type clutch with folding kickstarter pedal.

Primary drive chain $\frac{1}{2}$ " pitch and rear drive chain $\frac{5}{8}$ " pitch. Primary chain enclosed in oil bath case. Final drive chain protected by chainguard.

New AMAL "Monobloc" carburetor fitted with air filter.

Improved self-lubricating hydraulically controlled teledraulic forks incorporating the "Casquette" fork head.

Attractively designed front and rear fenders.

Leatherette covered multi-spring with dual adjustable rear coil spring suspension.

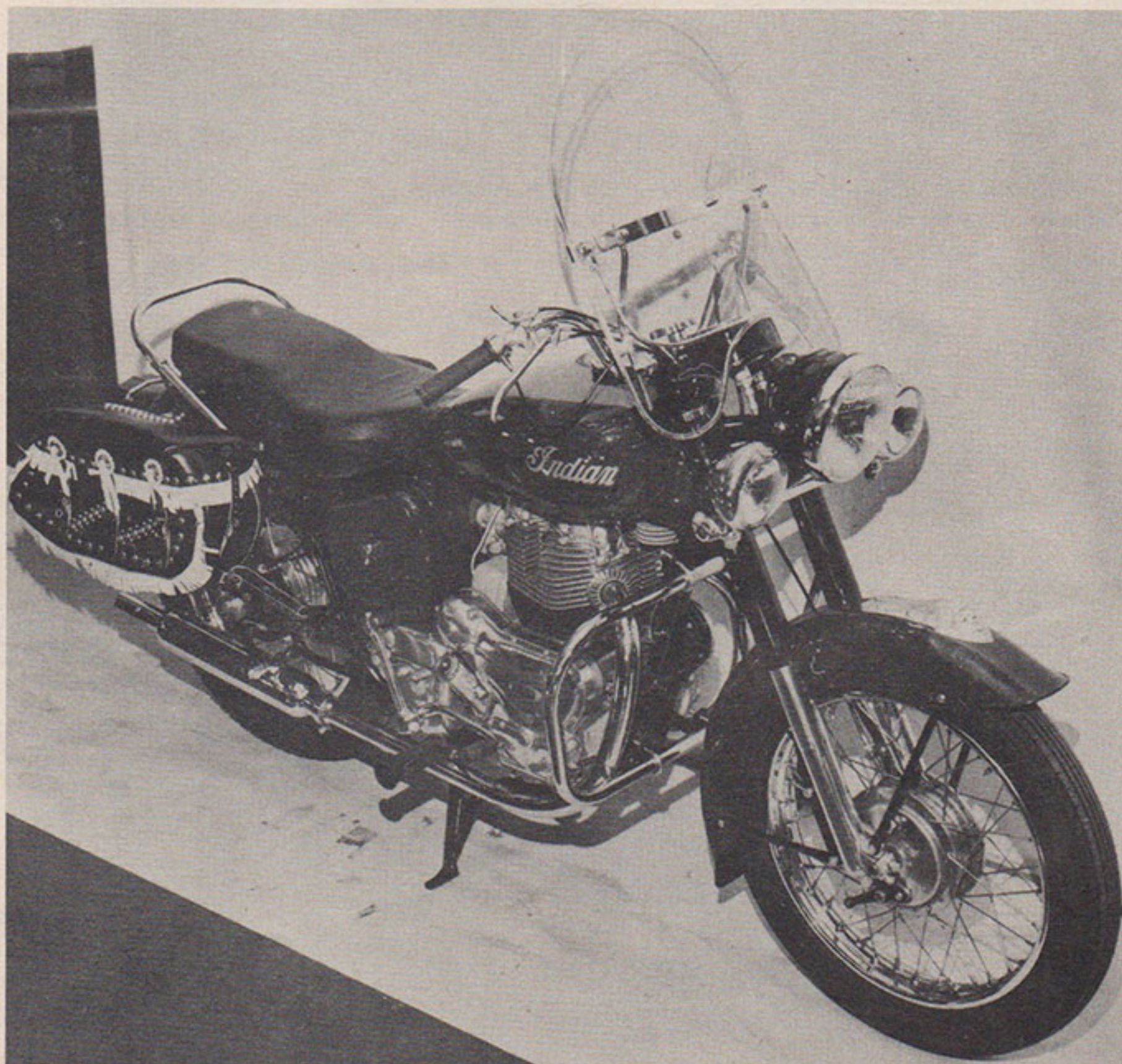
3.9 gallons fuel tank capacity with INDIAN decals mounted on sides. 4.1 pints oil tank capacity incorporated in crankcase.

Front brake operated by cable and right handlebar lever. Rear brake operated by foot pedal. 3.25 x 19" rear tire and 3.00 x 19" front tire mounted on WM-2 rim. Patented cushion drive incorporated into rear hub to eliminate all transmission and road shock.

Lucas A. C. generator and rectifier giving 6 volt, 60 Watt output, enclosed in primary case. Electric horn, headlight, and new combination stop and tail light. Ammeter, light switch mounted in "Casquette" fork head, New combination horn button and dimmer switch.

Chrome plated Western type handlebars

1956 Indian Trailblazer.



fitted as standard equipment.

Distinctive Indian red enamel on gas tank, fenders, toolboxes, air filter and chain-guard. Black enamelled fork and frame. Exhaust system, handlebars, control levers and many other parts highly chromium plated.

Smith's chronometric illuminated speedometer, solo saddle, tool kit, KLG plug, ignition switch and instruction book. New timing cover, new front fender insignia, footpeg rubbers with Indian imprint.

Further than the announcement of the four Indian Models, the Indian Company announces a complete new program in connection with Accessory Lines. Over the past months the Personnel at the Indian Company in Springfield have been very busy in designing a complete range of Accessories for their 1956 Models. Some of these Accessories are: windshields, spot lights, mounting bars, saddle bags, saddle bag brackets, seat rails, luggage carrier, and Sports Wear.

(Continued from page 14)

RESULTS OF LONG ISLAND SPORT RIDERS SCRAMBLES

JANUARY 29, 1956

0-175cc Class Final

- | | |
|-------------------|-------------------|
| 1. Tom Svack | 4. H. D. Mac Nary |
| 2. Allen Adamo | 5. John Egert |
| 3. Marie De Salvo | 6. George Adamec |

Heat #1 176-350cc Class

- | | |
|---------------|---------------|
| 1. W. Furlong | 4. P. Harasty |
| 2. C. Garby | 5. J. Elsier |
| 3. K. Urban | 6. G. Davis |

Heat #2 176-350cc Class

- | | |
|-----------------|-----------------|
| 1. W. Butz | 4. M. Nazar |
| 2. C. Kuster | 5. W. Burkhardt |
| 3. G. Burbacher | 6. J. DiSimone |
| | 7. J. Evans |

Heat #3 176-350cc Class

- | | |
|-----------------|------------|
| 1. J. Creelman | 4. G. Popp |
| 2. J. Waldron | 5. S. Ball |
| 3. L. Middleton | |

176-350cc Class Final

- | | |
|----------------|-----------------|
| 1. W. Butz | 6. J. Waldron |
| 2. W. Furlong | 7. L. Middleton |
| 3. J. Creelman | 8. K. Urban |
| 4. C. Garby | 9. G. Burbacher |
| 5. C. Kuster | |

Heat #1 351-500cc Class

- | | |
|--------------|------------------|
| 1. G. Ball | 5. Jos. DiSimone |
| 2. J. Bassey | 6. R. Randel |
| 3. R. Bauman | 7. W. DeLong |
| 4. R. Bynoe | |

Heat #2 351-500cc Class

- | | |
|----------------|-------------------|
| 1. F. Strmiska | 5. G. VanOverloop |
| 2. B. Scudieri | 6. J. Tremblay |
| 3. L. Soprano | 7. J. Pantanelli |
| 4. C. Myer | 8. E. Cocce |

351-500cc Class Final

- | | |
|----------------|---------------|
| 1. F. Strmiska | 5. R. Bynoe |
| 2. R. Bauman | 6. G. Ball |
| 3. B. Scudieri | 7. L. Soprano |
| 4. J. Bassey | 8. C. Myer |

The Northern Eagles Motorcycle club of Minneapolis held a three-wheel motorcycle ice race, Sunday February 12th, on Laddie Lake in Spring Lake Park.

About 100 persons attended the event with all proceeds given to the Heart Fund.

Trophy winners were the following riders:

JANUARY 29TH

Lightweight Class

- | | |
|-----------------------|---------|
| 1. Jim Steger | H-D |
| 2. Jack Snyder | Triumph |
| 3. George Shallbetter | Zundapp |

Mediumweight Class

- | | |
|------------------|---------|
| 1. John Egeberg | H-D |
| 2. Roy Egeberg | H-D |
| 3. Duane Burgman | H-D |
| 4. Bob Paterson | Triumph |

Heavyweight Class

- | | |
|------------------|--------|
| 1. Bill Gray | H-D 61 |
| 2. Vern Anderson | H-D 61 |
| 3. Jim Webster | H-D 74 |
| 4. Dave Webster | H-D 61 |

FEBRUARY 5TH

Lightweight Class

- | | |
|-----------------------|---------|
| 1. Jim Steger | H-D 165 |
| 2. Don Hase | Triumph |
| 3. George Shallbetter | Zundapp |
| 4. Mickey Frazer | Zundapp |

Mediumweight Class

- | | |
|------------------|--------|
| 1. John Egeberg | H-D |
| 2. Leo Hauck | Indian |
| 3. Kenny Johnson | H-D |
| 4. Roy Egeberg | H-D |

Heavyweight Class

- | | |
|------------------|--------|
| 1. Vern Anderson | H-D 61 |
| 2. Bill Gray | H-D 61 |
| 3. Jib Webster | H-D 74 |
| 4. Dave Webster | H-D 61 |

RESULTS OF REDLANDS ROAD RUNNERS, M.C. ORANGE BOWL HARE SCRAMBLES

JANUARY 15, 1956

*Denotes trophy winners

Expert Class

- | Place | Name | Make |
|-------|--------------|---------|
| 1.* | Larry Hester | Triumph |
| 2.* | Bob Sandgren | Triumph |
| 3.* | Al Rogers | A.J.S. |

Amateur Class

- | Place | Name | Make |
|-------|----------------------|--------|
| 1.* | Gene Lindley | Ariel |
| 2.* | Dud Moen | Mat. |
| 3.* | Babe Jay | A.J.S. |
| 4.* | T. Wayne Harris, Jr. | Mat. |
| 5.* | Donald aremba | B.S.A. |
| 6.* | Earl Purcell | Ariel |
| 7.* | Larry Robinson | B.S.A. |

MOTORCYCLING IN HAWAII WITH THE ARMY

The Tropic Lightning Motorcycle Club at Schofield Barracks, Hawaii, has established an enviable record over the past year. They have sponsored and participated in five tourist trophy races, two drag races, four hill climbs, three endurance runs and one economy run. In addition they contributed approximately \$425 to youth activities and \$25 to the Community Chest. The achievement of which they are most proud is compiling over 200,000 safe driving miles. For this they were awarded letters of commendation from the Commanding Officer, US Army Pacific, Commanding General 25th Division and Commanding Officer, 27th Infantry Regiment.

NEW YORK, NEW YORK... November 27—A delayed report from the Crotona Motorcycle Club, Inc., informs us of the results of the 35th Annual Crotona Halloween Classic Endurance Run. The event was originally scheduled for October 30 but a flash flood occurred that week-end and prevented all use of any roads. On the day of the run, the weather was only "slightly better" with many roads and bridges still washed out, causing a very low percentage of finishers. High point man and winner of the "REGPINK" Trophy was Drew Smith of Jamaica, L.I., N.Y., riding a Harley-Davidson OHV. Drew finished with a perfect score of 1000. In the Class A General Solo Class, Arnold Smith of New York City took top honors on a Harley-Davidson with a sum of 997 points. In third and fourth spots were Harley-Davidson riders Tom Svack and Mrs. Don "Leslie" Pink, both of Yonkers, N.Y. Bob Frick, Harley-Davidson, placed first with a total of 995 points in the Class B Novice Solo Class. Bob hails from Hartsdale, N.Y. Third in this class was Ray Krautheim of Morristown, N.J., on another Harley-Davidson. The Passenger and Sidecar Class was also a Harley-Davidson win with Edward Zito, North Bergen, N.J., and passenger Doug DeRek Calder in first place with 998 points. Anthony Astone and Leslie Leone placed third on their Harley-Davidson.

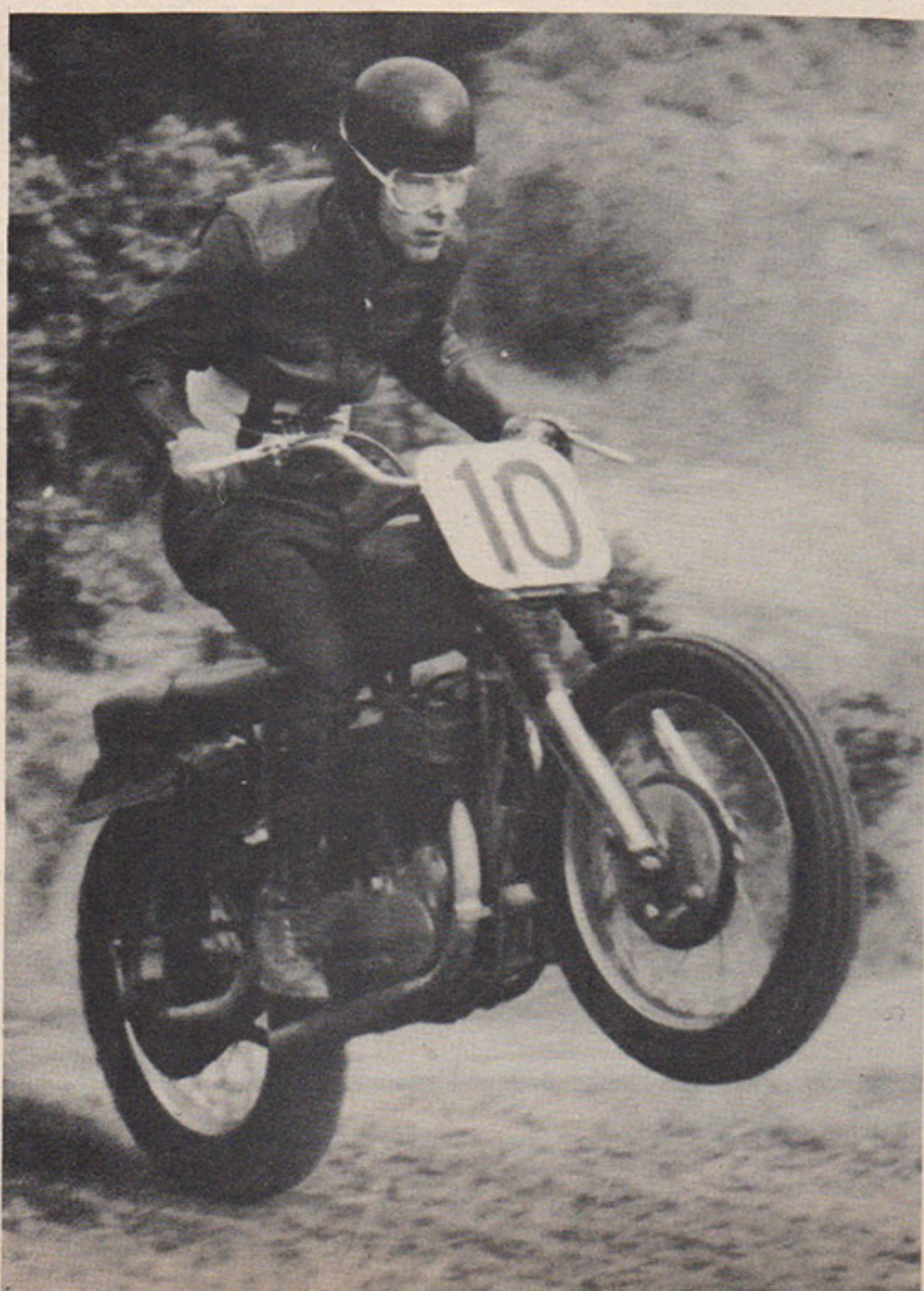


Mr. and Mrs. Jack Kulan of 4389 Phillips Highway, Jacksonville, Fla. Taken in their attractive store.



Jack Simmons (103) leads the start of the second expert heat. He is followed by Bro Smith (10) and Jim Atkins (3).

San Diego Moto-Cross



Robert Boxberger's graphic story of a Moto-Cross at San Diego is replete with action.



High-point men in the San Diego Sports Committee's 1955 Championships. Left to Right, unlimited class, 10th, Floyd Emde; 9th, Bruce Barlow; Don Peppmuller tied for 7th; 6th, Bob Davies; 5th, Howard Livermore; 4th, Marvin Hall; 3rd, Jim Atkins. Bottom row, left to right, 2nd in the lightweight class, Jack Adams, 1st, Lightweight, Bill Perrigan; 1st, unlimited class, Harry Loftus; 2nd, unlimited, Jack Simmons.

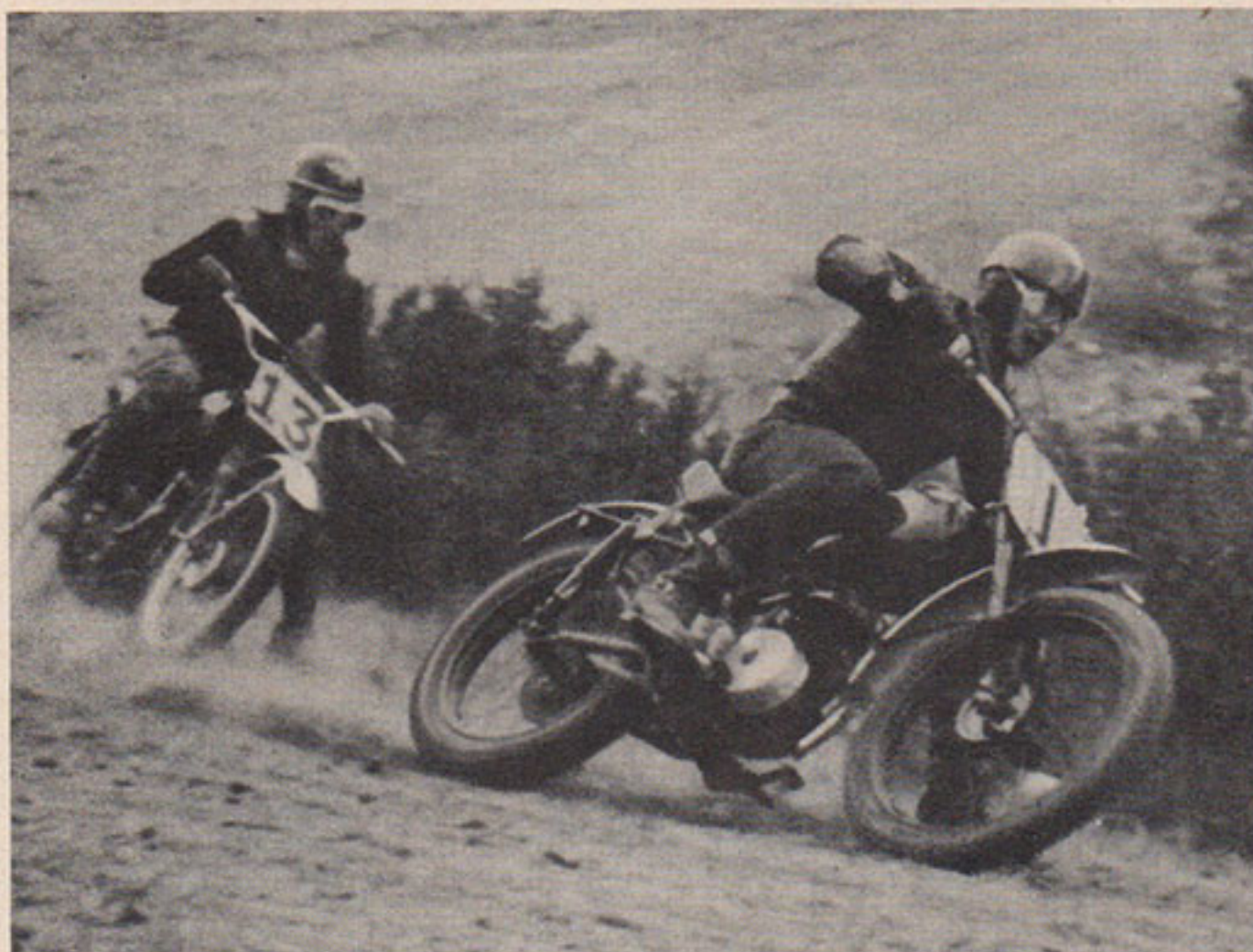
Bro Smith starts up a hill on Floyd Emde's HDK. Shortly after this picture was taken the machine went out of control and Smith was forced to abandon it at speed—he was unhurt.



Paul Holliger, one of San Diego's most promising young experts, prefers to slide the turns "feet up" in approved limey style. Holliger is a former Class C track driver.



At the start of the first expert heat "Pierre" Rabey (88) takes the inside line, Jim Atkins (3) takes the outside, and Paul Holliger (51) comes through the center.

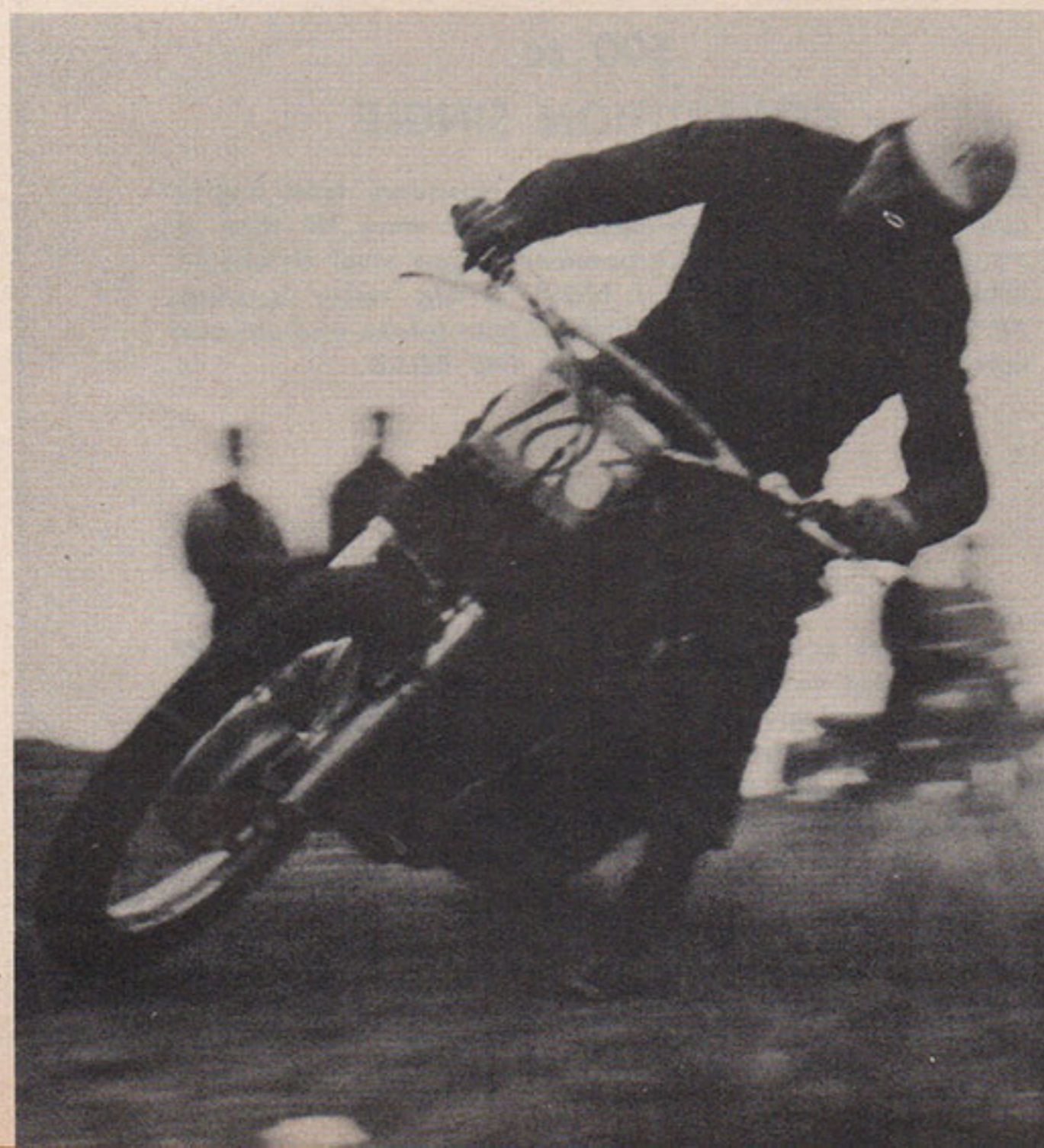


Perrigan cuts a swath leading Pat Cassad on the first lap of the second light-weight heat. Shortly after this Cassad's machine ceased to function.

Jack Simmons uses some "head English" going through the half-mile turn



The second amateur heat started with John Slinger (202) leading, followed by Jimmy Barrera (22) and Bill Stieder (41). Stieder won on points, and Slinger came in an overall second. Slinger is a new man to San Diego scrambling having just arrived from Hawaii.



Bill Perrigan leads the light-weight field in the second heat of the Lions moto-cross. Number 76 is John Matthews who placed overall third after Perrigan dropped out.

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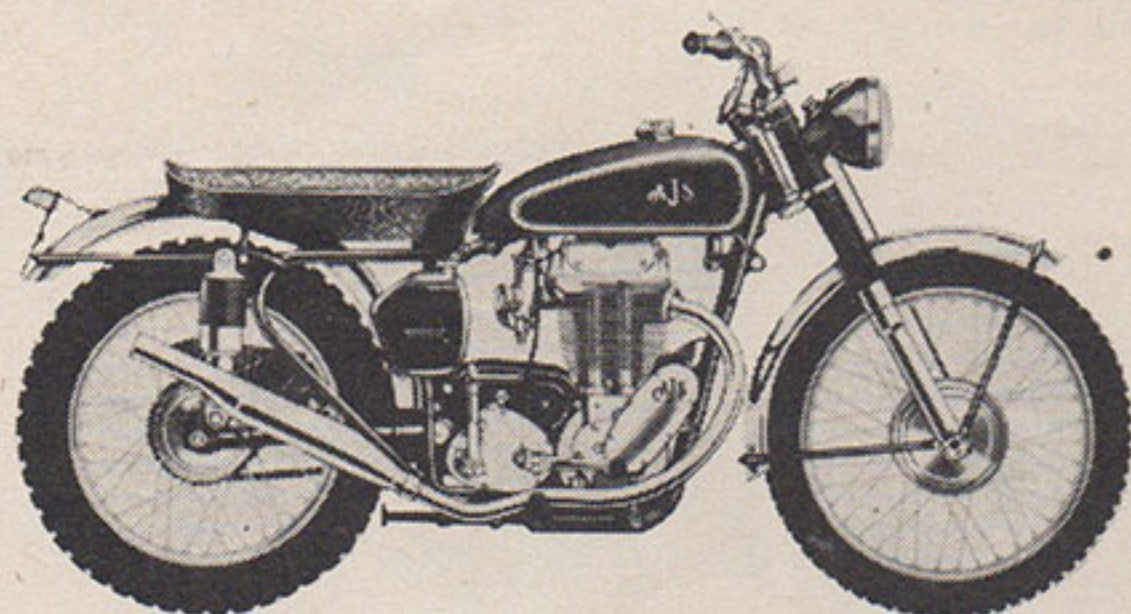


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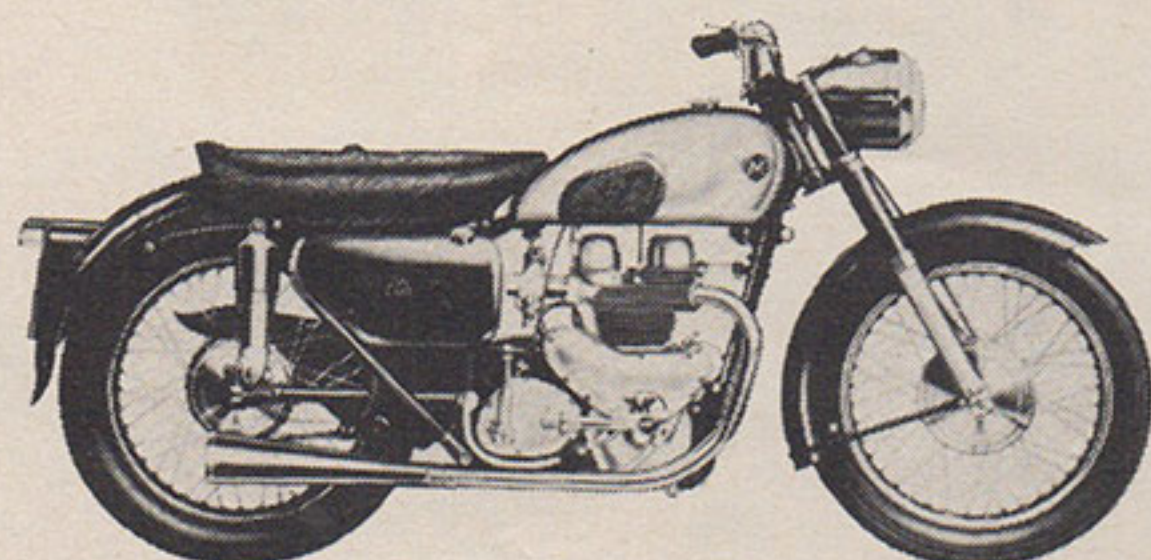
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CYCLE Service Tips



By J. B. Nicholson

DESPITE this rapidly becoming a turbine and jet age in the air, piston engines will unquestionably be with us for very many years on the road, and study of some of the common piston problems will prove useful to motorcyclists and mechanics.

More piston problems are encountered in motorcycle engines than with any other type and there are a combination of reasons for this condition. Basically, the high efficiency motorcycle engine has greater heat generating capacity and without any thermostatic cooling control, operates through a much wider range of temperature.

Sparkplug pre-ignition, a factor contributing to piston failure under hard service conditions, is a common fault arising from the wide range of head temperatures that are encountered. For moderate speed riding, a motorcycle requires a sparkplug with similar characteristics to an auto type. If driven at absolute maximum for prolonged periods however, a plug two or three grades cooler will be essential to avoid pre-ignition leading to piston failure.

Correct carburetor mixture is vital to piston life in high speed operation. A weak high speed carburetor mixture can quickly result in a hole burned through the piston crown. The safest rule in setting the high speed mixture on Amal carburetors for instance, is to determine the smallest size main jet that will give maximum speed and then for conditions where maximum speed is to be used for anything longer than a very brief burst, use a jet size 5 to 10% larger. This precaution will greatly minimize the possibility of excessive temperature and burned-out pistons.

The likeliest prospects for piston melting exist where there is a big fire in a small furnace, lean mixture at high speeds and plug pre-ignition. Piston failures generally don't just occur; they are caused. By identifying the cause, a repeat failure can be avoided.

Complete piston failure in normal service is generally preceded by ring failure. Combustion blow-by resulting from operation with badly worn or broken rings greatly increases piston temperature and leading to failure.

Piston Types—Mostly all motorcycle pistons today are made of low expansion aluminum alloy. Solid skirt designs are still popular in very small bore and racing engines. Thermal slot and other compensating skirt designs that allow for fitting with very close clearances without danger of seizure, are becoming increasingly popular, and are presently standard equipment in most 350 cc. and larger singles and in some 650 cc. twins. Harley-Davidson have used a thermal slot, steel strut piston in their 74" motor for many years. Where there is a choice, the slotted type is preferable to the solid skirt for average use. The objection to solid skirt pistons on larger capacity engines is that it is often not possible to fit sufficiently close to eliminate audible piston noise when cold and yet still have sufficient margin against seizure at sustained maximum performance.

Ring Equipment—The chrome plated ring ranks as one of the most important engine developments in recent years. Many new machines are now being supplied with a

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chrome top ring as standard equipment and such installation is well worth the slight extra cost when reconditioning. The action of one chrome top ring has been proved to reduce cylinder wear as much as one-third, and to triple ring life as well. Taper face compression rings are now used on some models and must be installed with the side stamped "top" toward the piston head. Triumph engines, for instance, use a taper face ring in the middle groove only.

Ring Replacement—A simple method of determining ring wear is to remove from piston and place squarely in the lower unworn end of the cylinder. Standard gap recommendations are .005" gap per inch of cylinder diameter. This works out at .012-.014" gap for 500-650 Vertical Twins, and .018" gap for a large bore type such as a B.S.A. Single or Harley 74. When dismantled for servicing, if wear is such that gap is triple the original or more, replacement is advisable.

New rings should be checked for gap by placing squarely in the lower unworn end of cylinder, and joints filed as necessary. Rings should also be checked to note that they go down fully into the piston grooves. Carbon at the bottom of piston grooves can easily be removed by use of a hacksaw blade and finishing off with a section of broken old ring as scraper.

Piston Examination—If inside and outside micrometers are available, the cylinder bore should first be measured at the lower unworn end to determine whether standard or oversize. Then a measurement should be taken at the most worn section at the extreme top end of the ring travel to determine the maximum amount of wear. If over .008", it is advisable to consider a rebore job; if less than this, and the piston is otherwise in sound condition, ring replacement may suffice. The piston should be

measured at top and bottom of the skirt and the clearances calculated on the smallest cylinder measurement. On a standard Triumph twin engine with solid skirt pistons, usual clearances are .0045" bottom of skirt-.006" top. An increase of .002" or more over the standard clearances will result in audible noise, particularly during the warming-up period, and anything worn beyond this is due for replacement. The top ring groove should also be examined. If a .006" or larger feeler gauge can be placed between the ring side and groove, ring breakage is likely to occur and piston replacement should be made.

Cylinder Boring and Oversize Piston Fitting—This should be done at a shop with suitable equipment and a good reputation in this line of work. If this is not being done at an experienced motorcycle shop it is important to take along the manufacturer's clearance specifications for the piston that is to be fitted. Bottom of skirt clearances for a few of the popular motorcycle types are as follows:

Model and Piston Type	Skirt Clearance
Harley 74 thermal slot steel strut	.001-.002"
Triumph 650 Twin, solid skirt	.004-.0045"
B.S.A. 650 Twin, thermal slot	.002"
Matchless A.J.S. wire-wound	.001"
Villiers 200 cc. solid skirt	.004"

When checking piston clearances it should be borne in mind that with the exception of some Villiers and 2-stroke types, mostly all pistons are cam ground or oval finished giving varying amounts of additional clearance on the sides and clearances must be checked at the bottom of the skirt at right angles to the piston pin. Pistons with a vertical skirt split must be fitted with the split in the direction of rotation—generally this is towards the front, except on Ariel Four machines where the front pistons have the split skirt to the rear and the rear pistons

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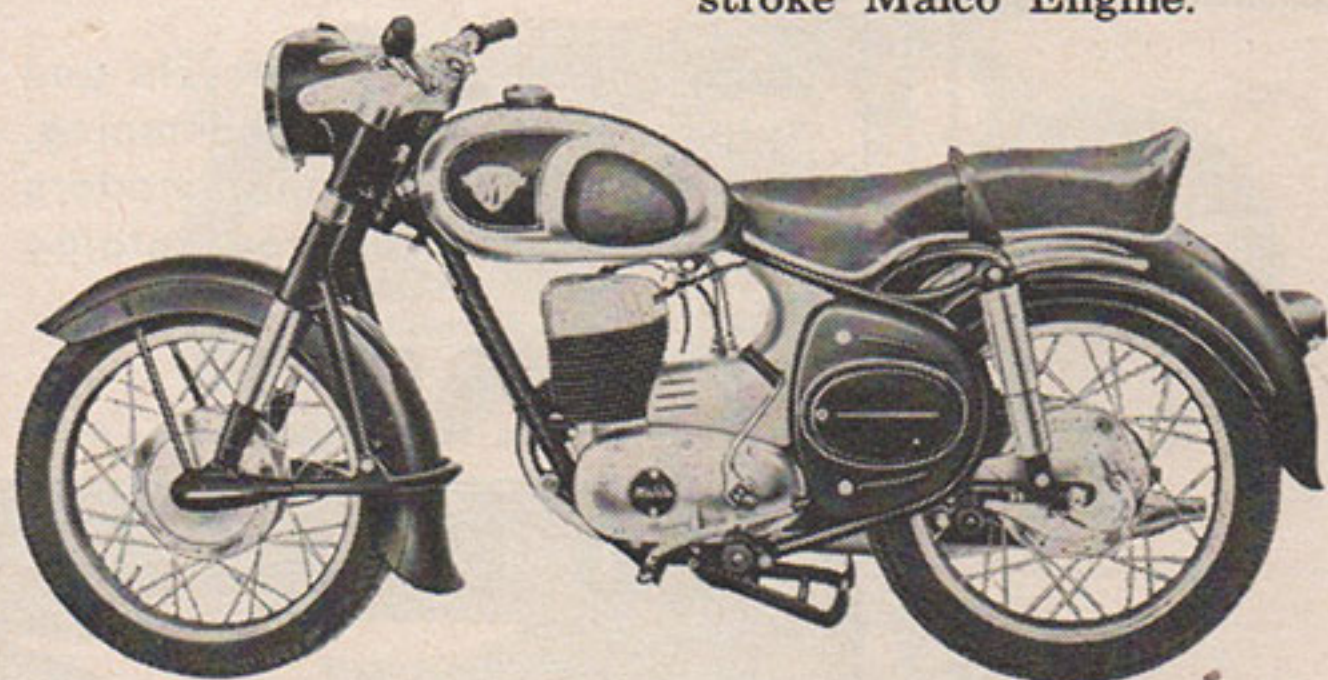
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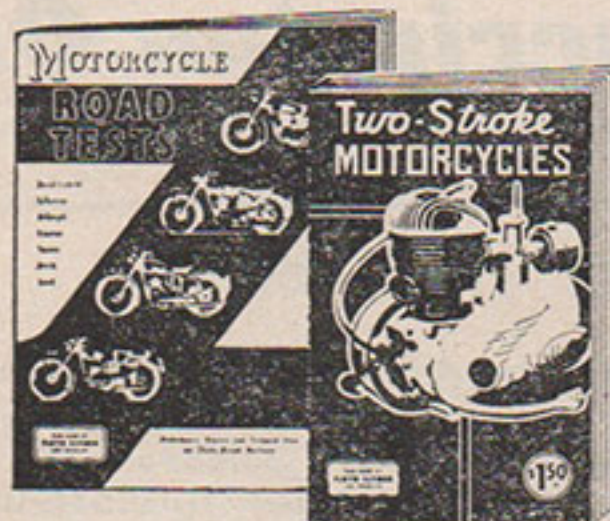
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Progressive running in over a period of 1000 miles before using sustained maximum performance, after piston replacement, is advisable. For racing .001" to .002" additional piston clearance is generally required. A reduction of .001" is generally possible on alloy blocks in comparison to iron blocks.

Pin Removal—Pistons should be warmed for pin removal and refitting. There is danger of bending the conrod if a tight fitting pin is drifted out without this precaution. A simple method of warming piston is to soak a rag in boiling waer and wrap around piston for a minute or so. In rare instances where it is necessary to drift out a pin, someone should support the piston on the opposite side with a block of wood. Another small servicing point not to be overlooked is to make sure that the pin lock rings seat right down in the piston grooves on assembly.

Compression Ratio Calculation—The procedure for calculating compression ratio is to set piston at exactly top dead centre on the compression stroke, tilt machine as necessary so that plug hole is at the highest point of combustion chamber. Using a graduated measure, pour light oil into the combustion chamber to measure the cubic centimetre capacity. The sum total of the compression space and cylinder displacement should be divided by the compression space. These calculations are shown below on a 500 cc. twin cylinder. A compression space of 31.4 cc. provides a ratio of 8.96:1.

Cylinder displacement	250 cc.
Compression space	21.4 cc.
Compression ratio	250 plus 31.4 = 8.96

Choice of Compression Ratio—The highest ratio will not always give the best results. On 500 O.H.V. Twin motors with aluminum alloy heads the new 9:1 ratio allowable under A.M.A. rules will generally give best results on 85 octane or better fuel. On many motors with iron heads however, better results will be obtained by not going above 8.5:1 ratio. A number of factors influence the selection of compression ratio. 8.5:1 is generally the highest ratio that can be satisfactorily used on a road machine with an iron head on standard gasoline. This ratio even is rather high for large displacement motors. For everyday use it is better to operate with a ratio slightly on the low side. A ratio that is too high for the available fuel will impair performance, through detonation and need for operating with excessive spark retard, and will increase likelihood of premature piston trouble.

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TRIANGLE

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1956 District 37 Schedule

Feb. 6	Scrambles.....Lions M.C., San Diego
Feb. 12	Scrambles.....Hilltoppers
Feb. 12	Enduro.....Trailblazers
Feb. 19	Scrambles.....20 Nite Owls
Feb. 19	Hare Scrambles.....Sinners
Feb. 26	Hare and Hound.....Dirt Diggers
Feb. 26	Trials.....Foothill Hawks
Mar. 4	Silver City H&H.....Las Vegas, Nev.
Mar. 11	Scrambles.....Downey M. C.
Mar. 11	Hare Scrambles.....Riverside Bombers
Mar. 11	Poker Run.....Motor Jockeys
Mar. 18	Poker Run.....Norwalk Centaurs
Mar. 18	TT Scrambles.....Dusters
Mar. 18	Hare Scrambles.....Rough Riders
	15" under
Mar. 25	Hare & Hound.....Highlanders
Mar. 25	Scrambles.....So. Calif. M. C.
Mar. 25	Flintlock Enduro.....Los Gauchos
Apr. 8	Scrambles.....13 Rebels
Apr. 8	Hare Scrambles.....Foothill Hawks
Apr. 8	Little Moose H&H.....Four Aces
	15" under
Apr. 15	Hare Scrambles.....Royal Riders
Apr. 15	Enduro.....Jack Rabbits
Apr. 22	Scrambles.....Sinners
Apr. 22	Poker Run.....Pomona Slow Pokes
Apr. 22	TT Steeplechase.....Riverside
Apr. 22	Ring Ding Field Meet.....Hi-Rollers
Apr. 29	Scrambles.....Rams M. C.
Apr. 29	Hare Scrambles.....Allstaters
Apr. 29	Field Meet.....Twin Wheelers
May 5	CATALINA GRAND PRIX
	and 6
May 13	Scrambles.....Downey M. C.
May 20	Scrambles.....Dirt Diggers
May 20	Trials.....Prospectors
May 27	Greenhorn Enduro.....Pasadena M.C.
May 27	Scrambles.....Pico Hornets
June 3	TT Steeplechase.....Riverside
June 10	Scrambles.....Scramblers
June 10	Road Enduro.....Double Packers
June 17	Scrambles.....Checkers
June 24	Hill Climb.....Motor Jockeys
June 24	Hare Scrambles.....Hilltoppers
June 24	TT Steeplechase.....Riverside
July 8	Sporting TT 21" over.....Shamrocks
July 8	Hare Scrambles.....Dyna-Mites
	15" under
July 15	Sporting TT.....20 Nite Owls
	15" under
July 15	Field Meet.....Norwalk Centaurs
July 15	Reliability Run.....Thumpers
July 22	Scrambles.....Gophers
July 22	Poker Run.....Allstaters
July 29	Hillclimb.....Jack Rabbits
July 29	Sporting TT.....Redland Rd. Runners
Aug. 12	Scrambles.....Sinners M. C.
Aug. 12	Poker Run.....Cruisers
Aug. 19	Hare Scrambles.....Pomona Valley
Aug. 19	Trials.....Norwalk Drones
Aug. 26	Hillclimb.....Hare Hunters
Sept. 9	Hare & Hound.....Dyna-Mites
Sept. 9	Scrambles.....Highlanders
Sept. 9	Poker Run.....Motor Jockeys
Sept. 9	TT Steeplechase.....Riverside
Sept. 16	Hare Scrambles.....Dusters
Sept. 16	12-Hour Enduro.....Pasadena M. C.
Sept. 23	Hare Scrambles.....Prospectors
Sept. 23	Road Enduro.....Royal Riders
Sept. 23	TT Steeplechase.....Riverside
Sept. 30	Scrambles.....13 Rebels
Sept. 30	Trials.....Jack Rabbits
Sept. 30	Hare&Hound San Bernardino M.C.
Oct. 14	Hare&Hound.....San Gabriel M.C.

(Continued on page 42)



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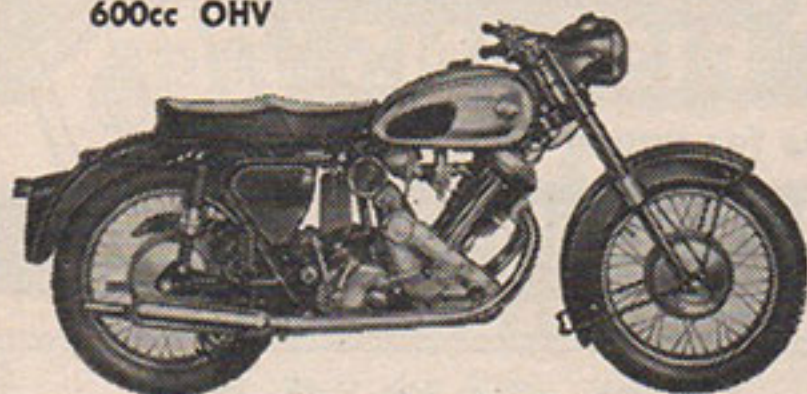
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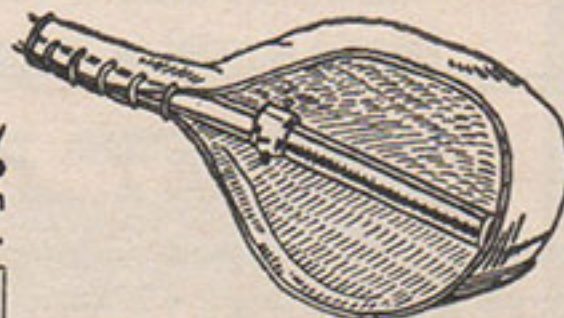
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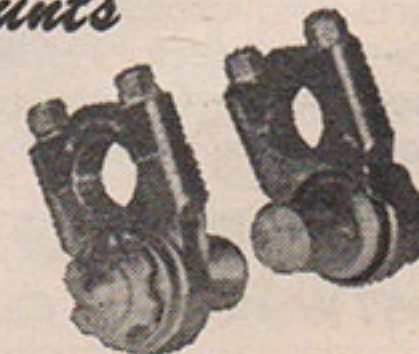


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Cycle News CAPSULES

Ranny Bynoe of Amityville, N. Y., on a Triumph was the only one to turn in a perfect score of 1000 points in the Northeastern States Championship midnight run—he won the "Regpink" Trophy and the Northeastern States Championship for Reliability Trials in the 37th annual running of the famous Crotona, N. Y. midnight run—Jim Ransom, Harley-Davidson, after running nip and tuck with Ranny all night dropped one point to place second—Al Bischoff of Preakness, N. J., turned in top score in the sidecar class with 999 points riding an Indian—Gene Hopper of Yonkers, N. Y., riding Harley-Davidson, won the novice solo class with 988 . . . The Grand Palais in Brussels, Belgium, now provides a home for the combined car, commercial vehicle, motorcycle and cycle show just recently closed. Most all makes of motorcycles were displayed and nearly every stand displayed a scooter—NSU introduced their new scooter which they are now manufacturing instead of manufacturing the Italian Lambretta under license as has been done in the past . . . The show indicated that German manufacturers are gaining a stronger foothold on the light-weight market than they have had in the past . . . Great Britain retains sales supremacy in the big machine class and the appearance of two new BSA scooters, the luxurious "Beeza" and the jack-of-all-trades "Dandy" had a salutary effect upon those who think that British manufacturers are always too conservative. Even the nationalized Czechoslovakian industry introduced two new light-weight two-stroke models, and East German factories showed some machines of up-to-date appearance. However, some are still of near-vintage design—the little 350 cc transverse twin German Hofman looks much like a smaller BMW or Zundapp. The Belgian industry is using more and more imported German and sometimes British two-stroke light-weight engines for their new models, although a few engines are of Czech or Italian origin. There seems to be close collaboration between Belgium's two principal factories, F.N. and Sarolea, so that there is little difference excepting in color schemes to distinguish the 250 cc twin made by one from that made by the other firm . . . Just as in Great Britain, Belgian bicycle makers have now decided that the "moped" (the light bicycle powered unit) cannot be avoided. Nearly every Belgian firm offered at least one moped and most of them utilized the German Sachs power unit. Motorcycle manufacturers and dealers alike are all in agreement that these light-weight power cycles tend to increase the potential sales of light-weight and larger motorcycles because they are actually educators—usually the per-

son who learns to operate a light-weight powered cycle later becomes a prospect and a proficient rider of higher powered two-wheeled vehicles . . . It seems that CYCLE is color conscious. In six years CYCLE editors have changed from Green to Brown to Black—our new editor is Gib Black, a long time practical motorcycle rider, aviator, technical engineer, and enthusiast . . . BSA are grabbing onto a well-known name for a new model—The "Catalina" Scrambler . . . Wonder if the AMA will ever get around to formulating a set of rules for "drag" racing? CYCLE suggested that the AMA set up such rules nearly two years ago—so far no action—probably filed in basket "13" . . . Groucho Marx recently interviewed Grand National Champion Brad Andres on his show. Groucho also mentioned that he was once a motorcyclist, in fact said he had owned and rode a Harley-Davidson . . . A new committee for the promotion of motorcycle sports has been formed in Washington, D.C. Names listed on their bulletins are R. Sadler Jr., H. H. Reiber, W. Armstrong, L. Swenson, L. M. Stern, and C. R. Smith—address is Box No. 2122, Washington, D. C. . . . Motorcyclist Edgar Bergen (Charlie McCarthy's daddy) has a new TV show "Do You Trust Your Wife"—Edgar once bought a Harley-Davidson "45" from L. A. dealer Rich Bude-lier and an Indian Junior Scout from then Indian L. A. distributor and now CYCLE publisher, Floyd Clymer . . . Wilson Springer, who conducts one of the world's best columns (Los Angeles Herald-Express) on Motor Sports, has long been a practical motorcyclist, and he has converted his boss, Dave Hearst, son of famed publisher, the late William Randolph, to motorcycling . . . We must not forget Red Phillips who does such a fine job of reporting cycle news in the Columbus, Ohio, Star—the industry needs more "good-will" ambassadors like Springer and Phillips!



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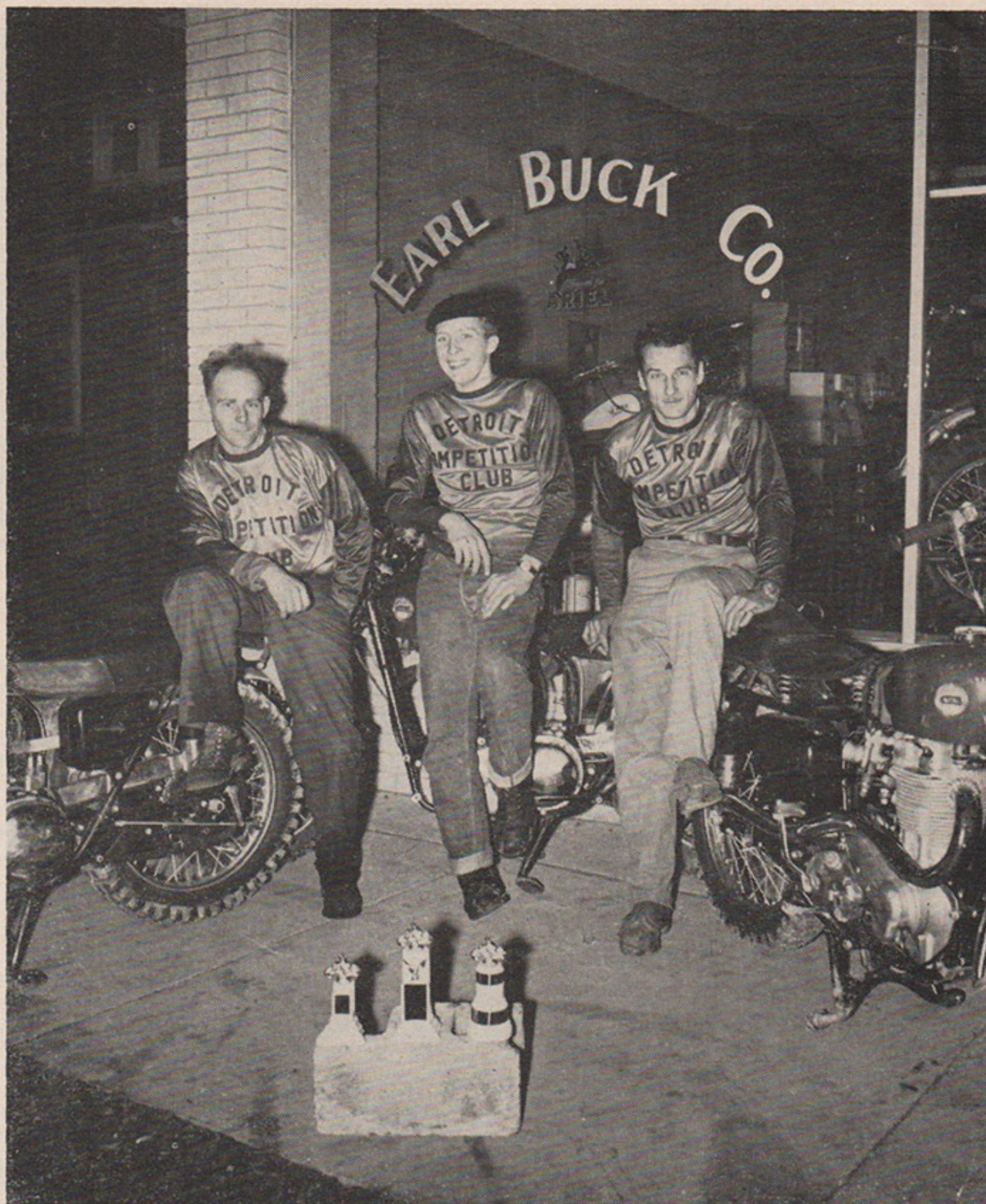
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Earl Buck, Ariel Dealer in Hazel Park, Michigan and well known hillclimb expert sends us this shot of three Ariel Scrambler riders who were 1-2-3 in the recent Sportsman's Hillclimb at Port Huron, Michigan. Left to right are J. Keselowski, George Lanyon Jr. and Oliver Baresi.



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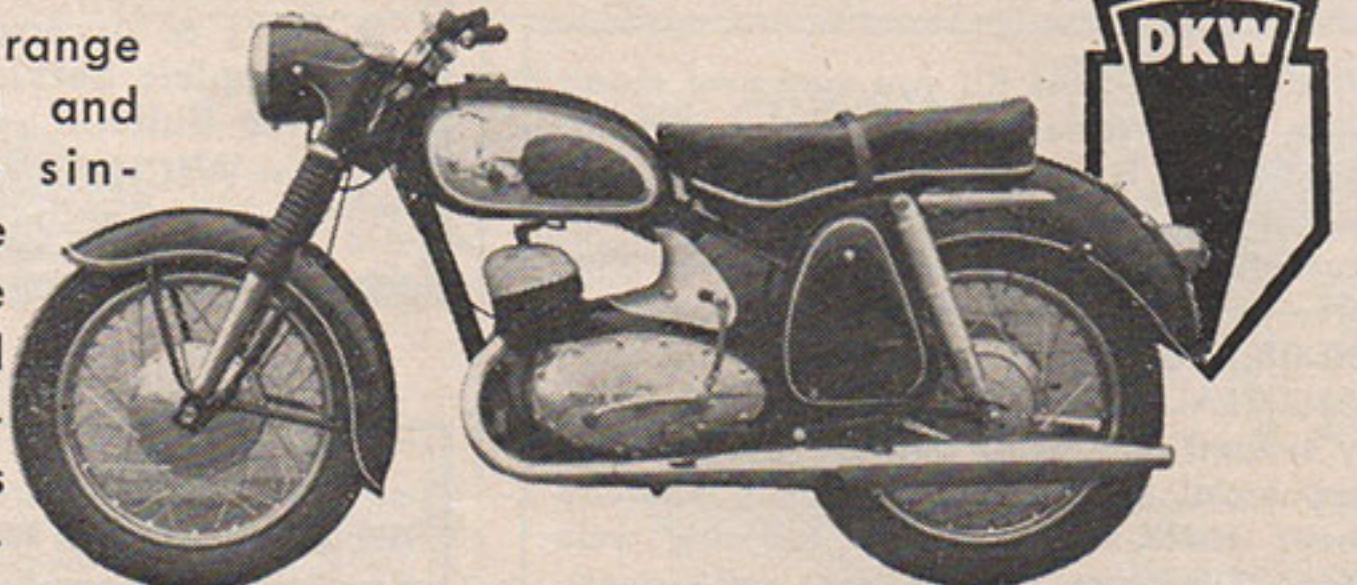
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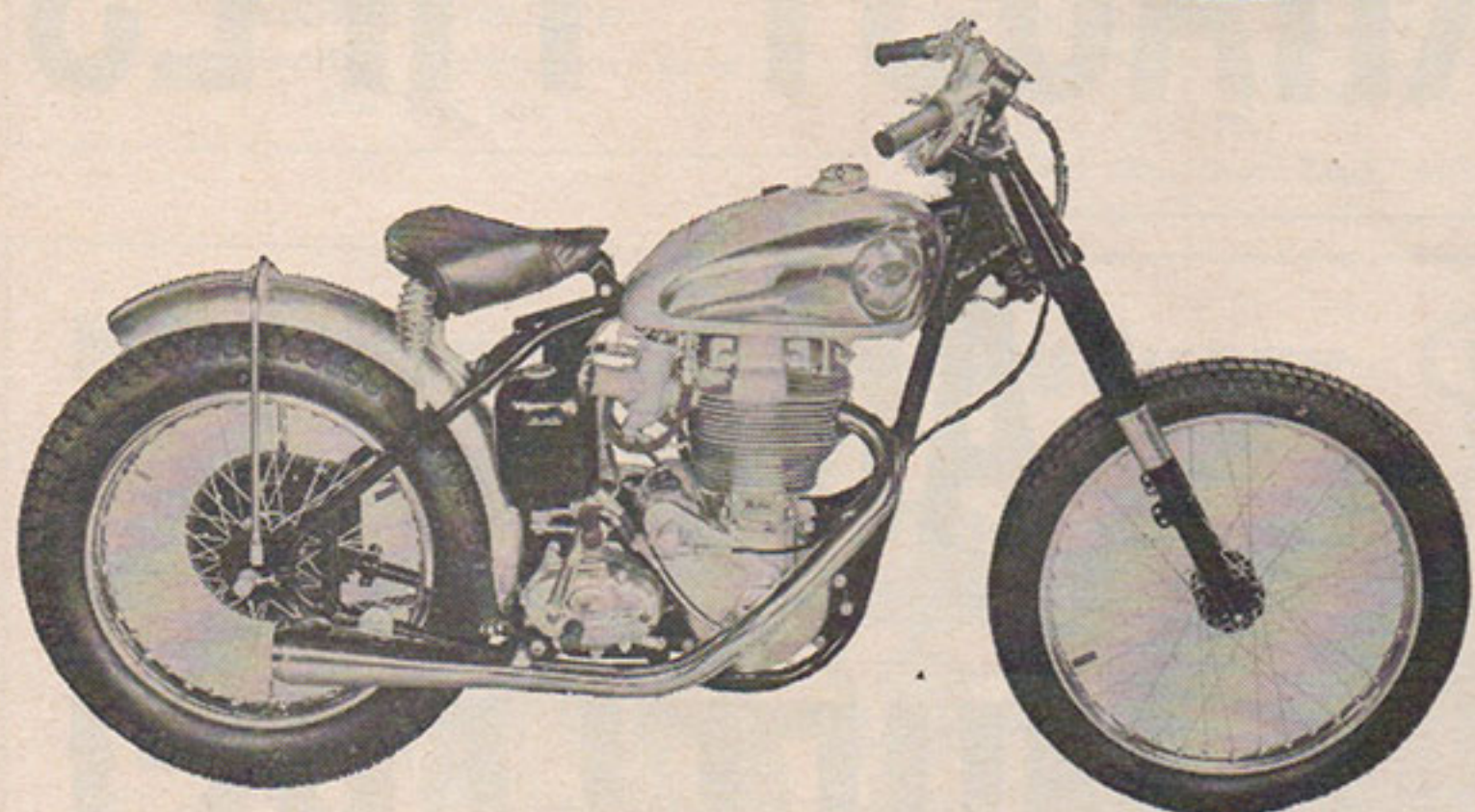
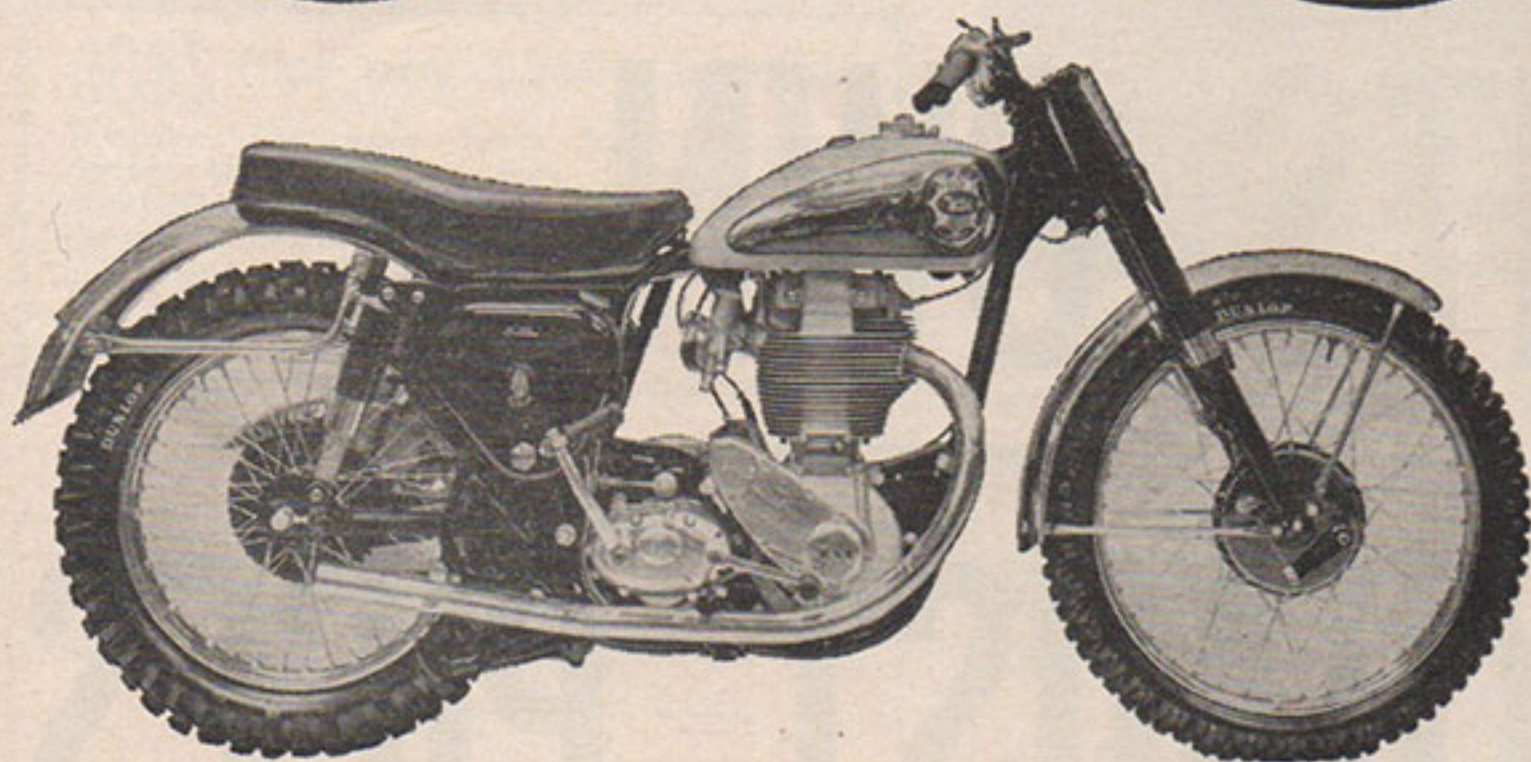
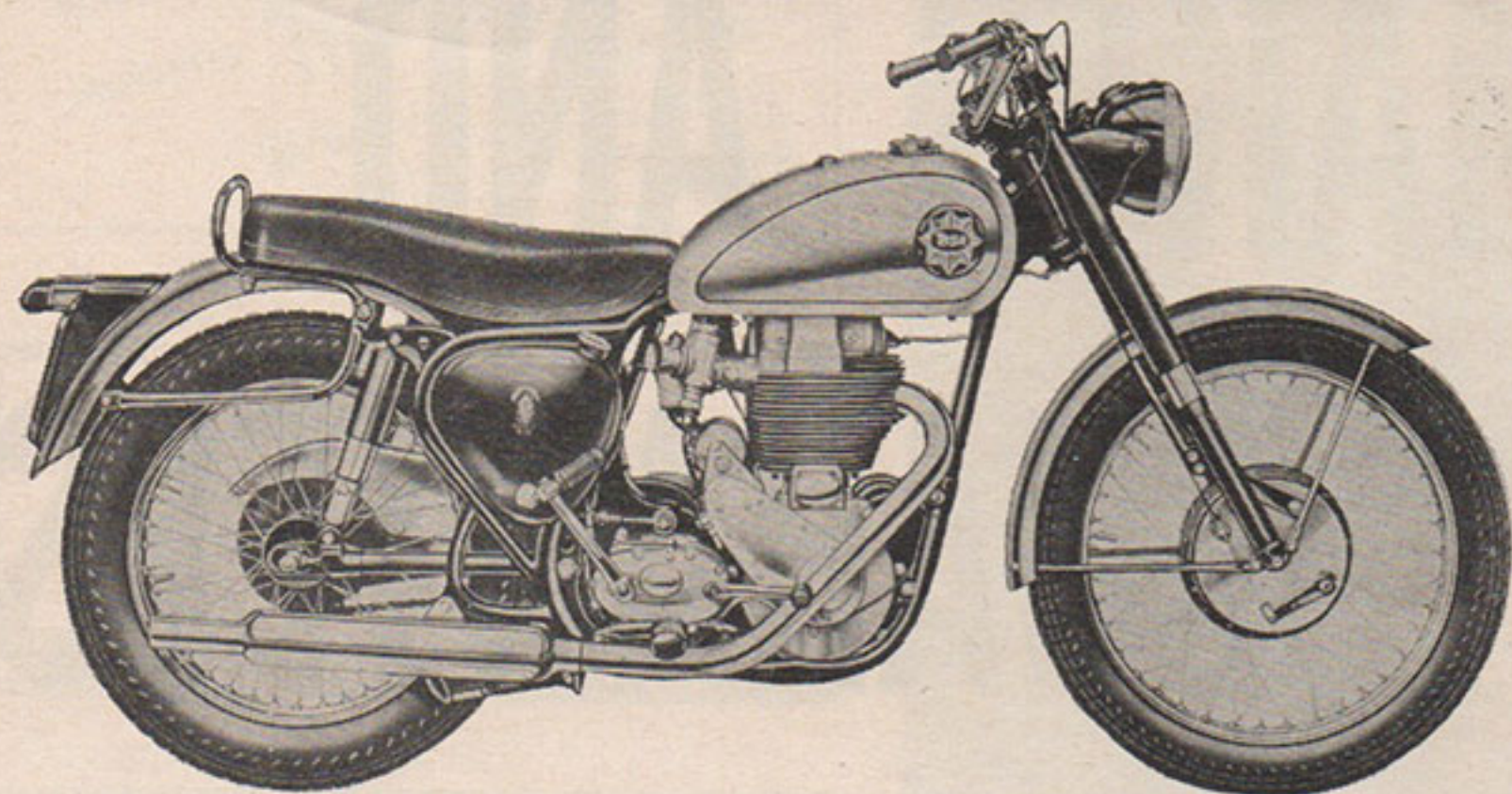
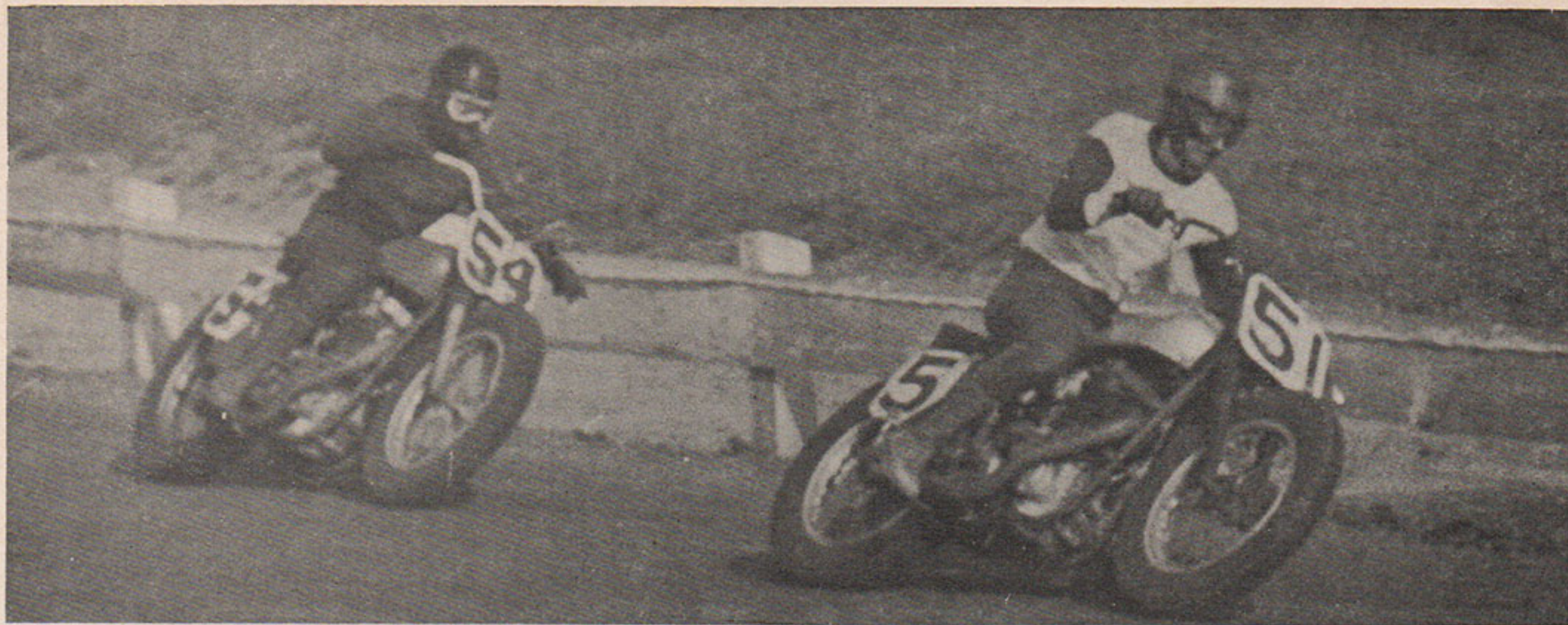
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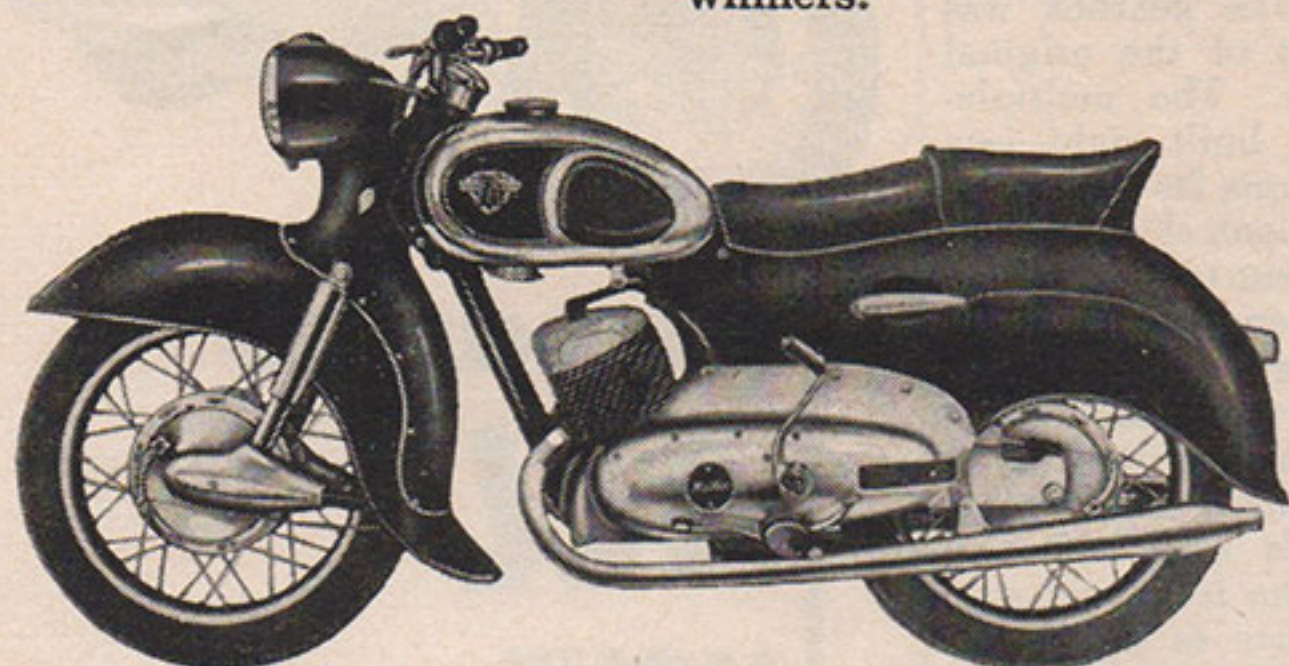
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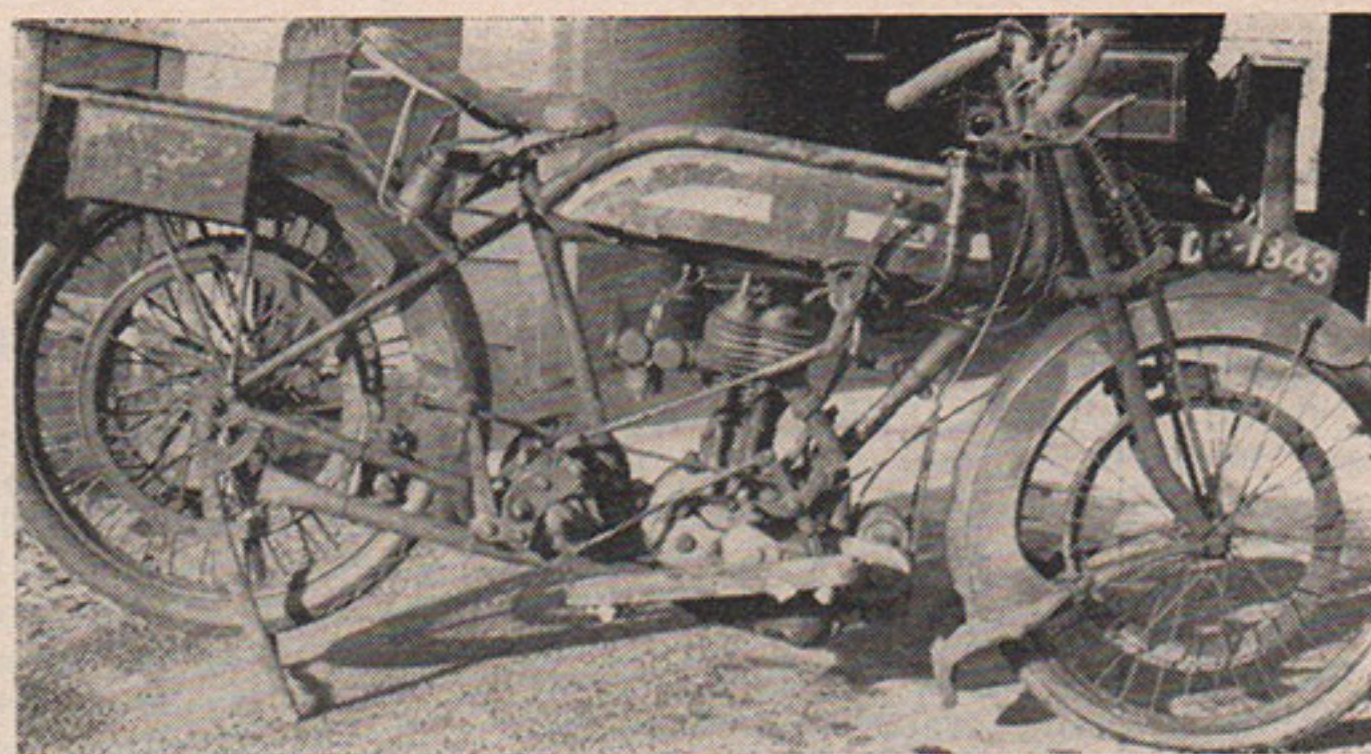
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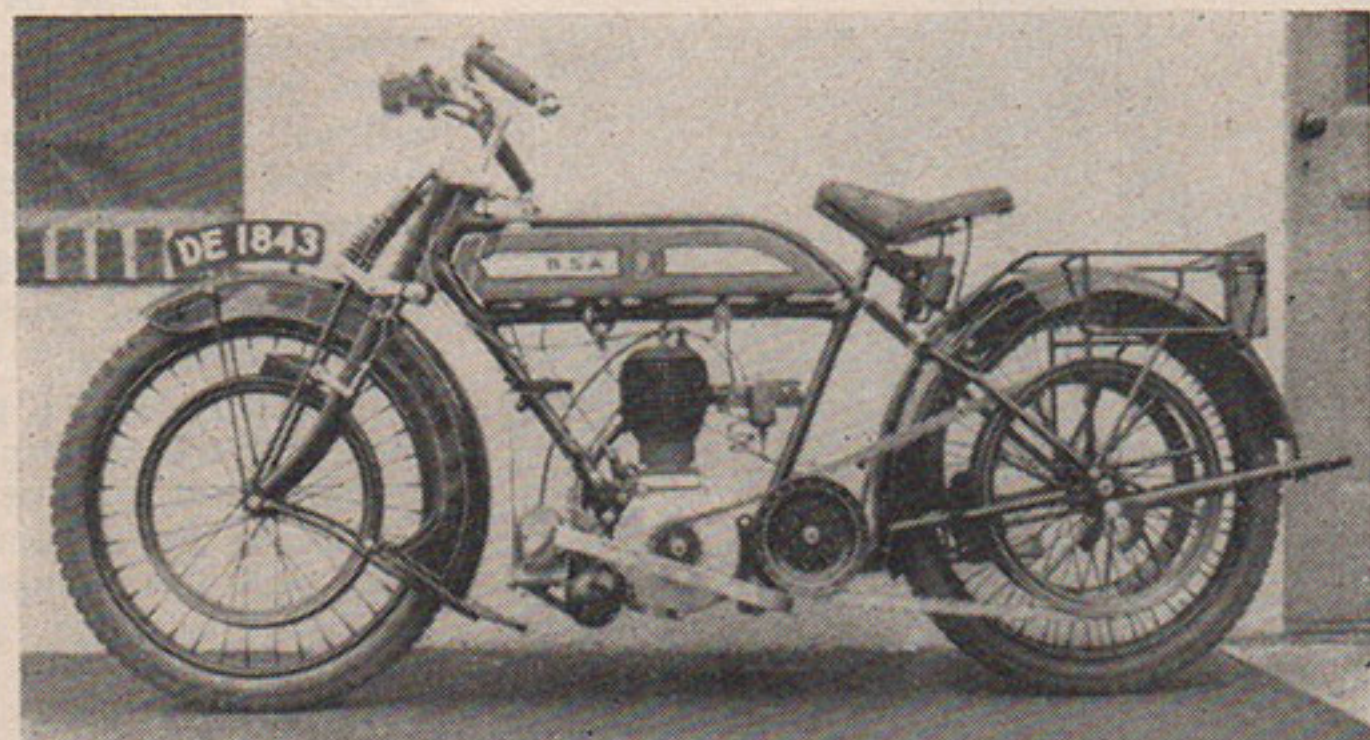
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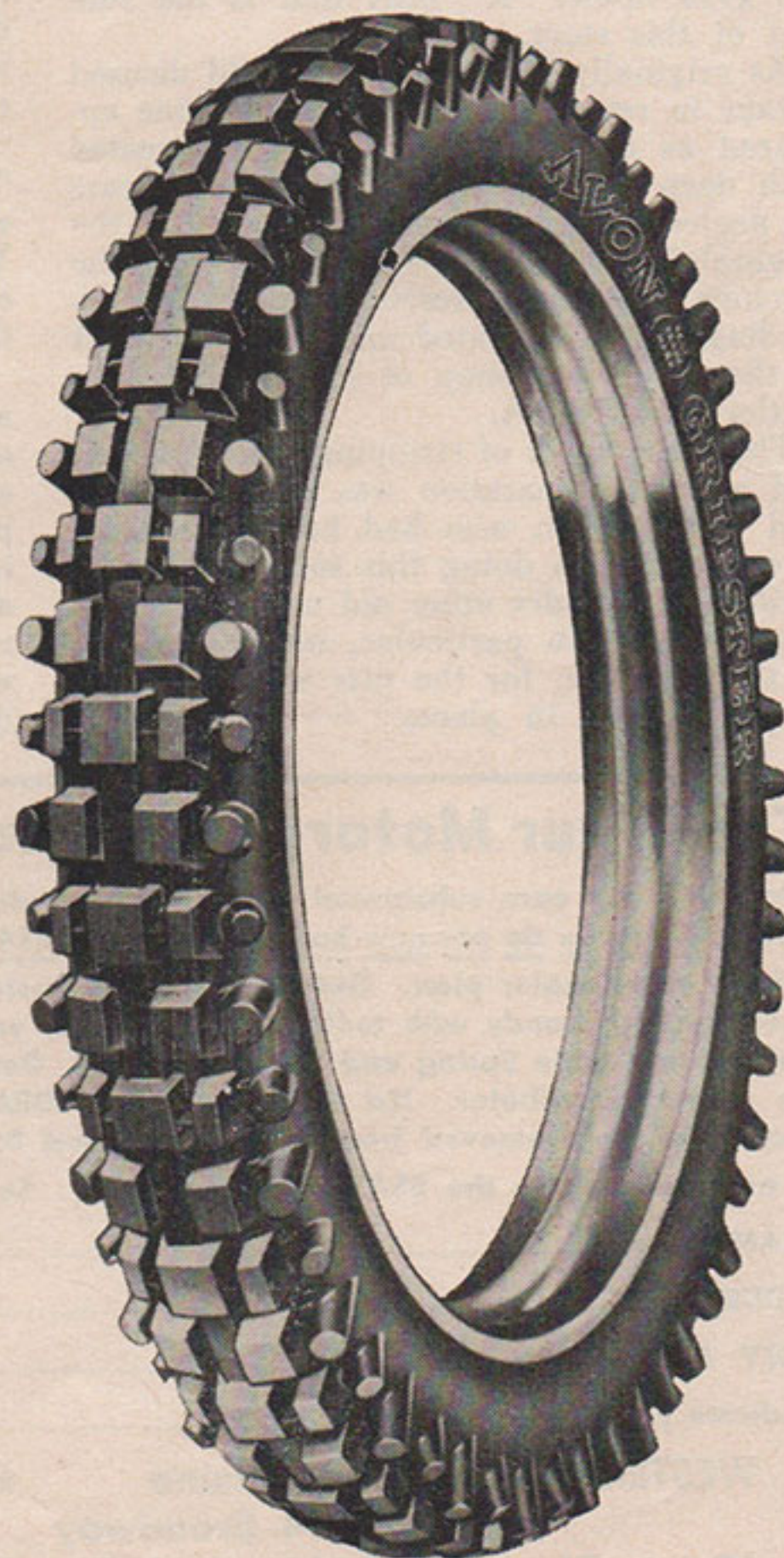
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Old Beeza Lives On

Well known in the motorcycle world, is the fact that T. A. Hodgdon, head of the U.S. Factory Branch of BSA, has for years past been a collector of antique motorcycles. Although an extremely busy man, Mr. Hodgdon still finds an odd hour or two to devote to his favorite hobby—restoring ancient motorcycles (and cars) to pristine condition. More recently, it should be said, Mr. Hodgdon has turned over the actual restoration work to his son Ted Jr. who is a high school student.

Being the BSA chief, he naturally turned to the search for a suitably aged example of the Birmingham product to work over and bring back to original condition. His quest was greatly aided by his personal friendship with well known British collector of old bikes, Charles Broad of London, England. It was Charlie who first discovered



Mr. Hodgdon rides the result.

the 1914 Model "K" BSA that is the subject of this story.

As originally discovered in an old disused garage in remotest London, the machine appeared as indicated in Photo 1, encrusted with deep rust and the dirt of many years of neglect. Happily, though, most of the original "works" were still intact, and the machine seemed to present possibilities. Accordingly, it was crated and shipped direct to the home workshop of Mr. Hodgdon in Nutley, N.J., U.S.A.

The heavy work of stripping, rust removal, and general preparation was undertaken by Ted Hodgdon Jr. who had had some years of experience in doing this sort of thing to various and sundry other old motor bicycles. Rust removal, in particular, was a problem in this instance, for the pits were as much as 1/16" deep in places.

While the frame and wheels were being worked over, the task of rebuilding the engine and gearbox was undertaken by the elder Ted. Everything was taken apart and laid out on the bench for inspection. Here, the years had been kind, for most of the "insides" proved usable. Every part of the engine and gearbox was cleaned up before reassembly. In the case of the power unit itself all parts remain original. The carburetor, of unique "double barrel" design (and of BSA manufacture) presented a problem for some of the small parts were missing and had to be manufactured.

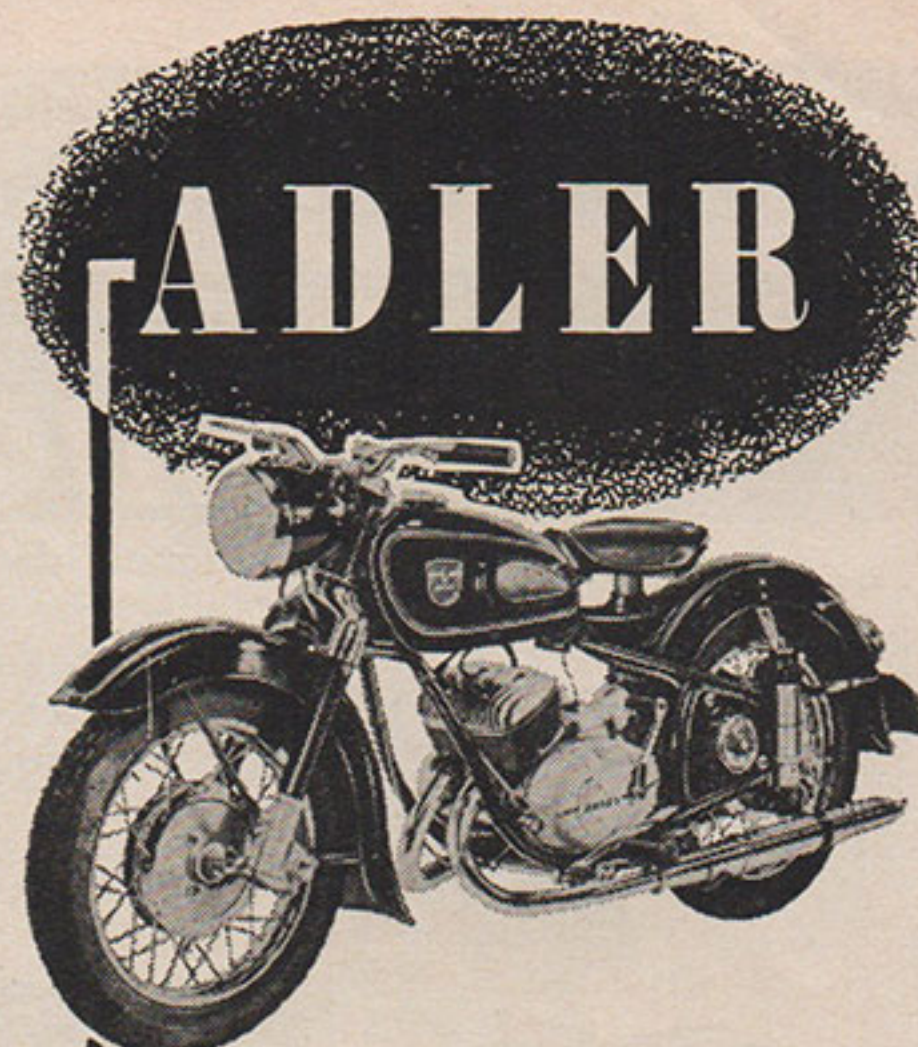
The "sparks department" was completely out of commission, and the magneto had to be rebuilt from scratch. The gearbox was in fair condition and most of the original parts are still functioning. The multiple-disc steel-to-steel clutch is built right into the gearbox and still performs its appointed duty. Handlebars, levers, and control rods were thoroughly gone over and sent to the platers. Wheels were sand-blasted and re-enameled.

A very painstaking job of enamelling and striping was done by both the Teds—a job which is especially evident on the handsome, panelled tank. This tank incorporates original manufacture decals also found in England. The number on the front and rear plates is the original number as issued for this machine in 1914. (In England, motorcycles and cars carry the same number as long as they exist.)

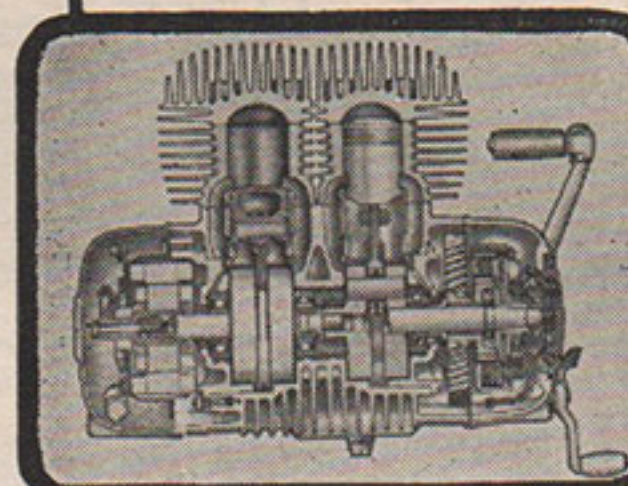
Gradually, over a period of some months, the hundreds of large and small jobs were accomplished, and at long last the machine was ready for reassembly. Included in this task was the mounting of a genuine ex British War Dept. acetelyne headlamp as used in World War 1, and a tricky little taillight—both items found by industrious Charlie Broad in London. (At this writing an original type gas generator has been uncovered and is being prepared for attachment in the clamps provided on the front down tube of the machine). Another new item on the machine is a built up vee belt exactly like the ones originally specified.

Following assembly, the machine was "fired up" without too much bother, and it was immediately discovered that a pre-World War 1 BSA has a somewhat different exhaust note than current model singles of the same brand!

"Chuff-chuff" is the descriptive to apply, and the performance of the old timer is as gentle as the sound would indicate. Low compression, belt drive, and low gearing provided a much different type of "go" than is currently fashionable, but on a back road, away from traffic, the old "Beezer" still gives a pleasant ride—a reminder of the days when folks were in less of a hurry! (What do we rush around for?)

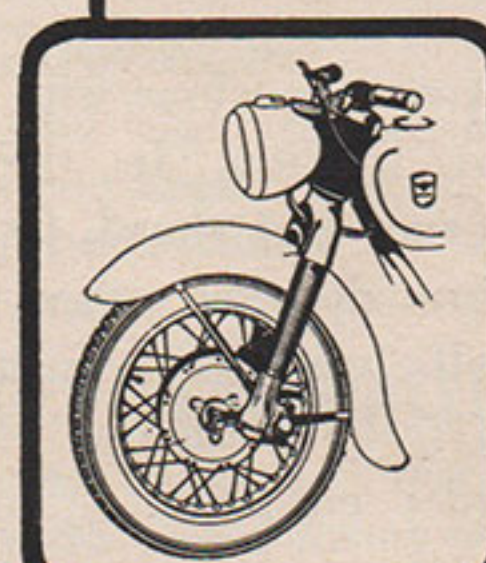


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your
expectations!



Look forward to a new adventure in riding this powerful, vertical twin 250 cc stroke with four-cycle action! Run it as low as you like or ride it up to 75 mph.

Here are other outstanding features:
completely enclosed carburetor
and generator for clean riding; terrific acceleration; four speed gearbox; ultra-modern frame; completely enclosed chain case; full hub front and rear brakes.



A comfortable, safe enjoyable ride is guaranteed thanks to ADLER'S swinging link forks with built-in shock-absorbers and rear telescopic springing.

Yes, there's a new adventure in light-weight riding waiting for you with the ADLER 250 cc TWIN that accelerates from 0 - 60 M.P.H. in 11 seconds.

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Now you can earn substantial extra income under the new BSA rider-dealer plan! In some areas where we do not now have a franchised BSA or Ariel dealer we will offer the advantage of our rider-dealer plan. Only a nominal investment is necessary. If you are interested in motorcycling, handy with tools, and ambitious, you may qualify as a BSA rider-dealer. Get set for profitable Spring and Summer selling. Get full information by sending coupon below to nearest Distributor. No obligation. BSA DEALERS: Above plan offered ONLY in open territories well removed from ANY established BSA Dealer.

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(Dept. C) Oakland, Calif.

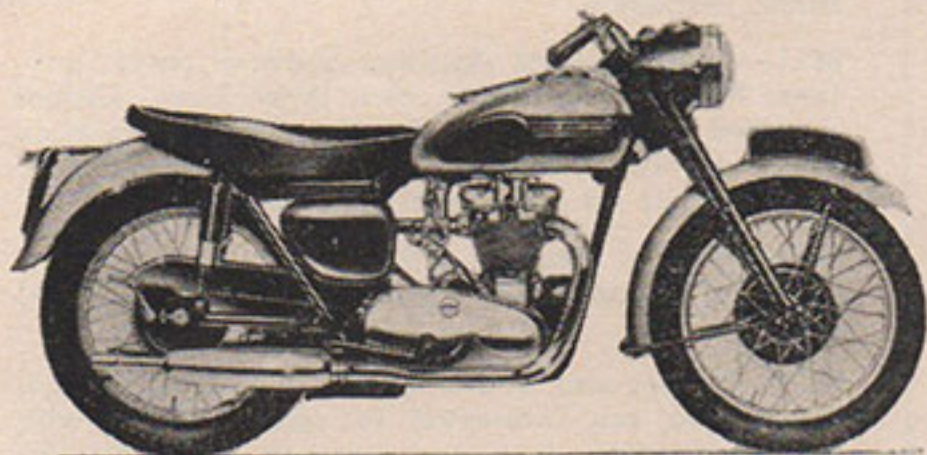
EASTERN U.S.A.: BSA Incorporated
639 Passaic Ave.
(Dept. C) Nutley, N. J.

...the lightning speed and grace
of a **TIGER!**



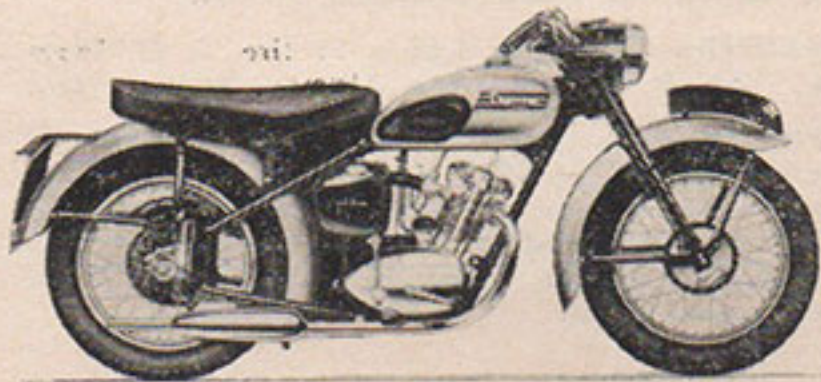
TIGER T110

Entirely new die-cast alloy cylinder head assembly with cast-in valve inserts. External oil lines eliminated for greater efficiency and cleanliness. New cork—Neolangite 5-plate bonded segment clutch. New gas tank with chrome trim. Many other improvements.



TIGER T100

Improved steering due to new strengthened head bearing (a new feature in all Triumph "Twins"). Exclusive all-alloy engine, with aluminum die-cast head and cylinder block with replaceable sleeves. Super-comfort "Jet Wing" twin seat.



TIGER CUB T20

Restyled and redesigned for greater mechanical reliability! Larger, reinforced gas tank. Larger primary chain for greater durability. Larger oil tank. New 16-inch, all-chrome wheels with larger-section, better riding tires.

by **TRIUMPH** of course

It's yours with a Triumph Tiger—all the speed, the grace, the comfort, the beauty, the stability and the safety that a sporting rider can ask for! Like ALL Triumph Motorcycles, the Tigers (T110, T100 and T20) are made with painstaking care and precision. All of them have many wonderful new features for '56. Nothing has been overlooked in the determination to keep Triumph out in front as the world's best—and fastest*—motorcycle! Visit your Triumph dealer today! Test ride a '56 Triumph Tiger. Get the thrill-of-a-lifetime in motorcycling!

*Fastest thing on 2 wheels! World's speed record of 192.308 M.P.H. set by TRIUMPH at Bonneville Salt Flats.

TIGER T110

40 cu.in. (650 c.c.) Vertical Twin OHV

THUNDERBIRD 6T

40 cu.in. (650 c.c.) Vertical Twin OHV

TROPHYBIRD TR6

40 cu.in. (650 c.c.) Vertical Twin OHV

TIGER T100

30.5 cu.in. (500 c.c.) Vertical Twin OHV

TROPHY SCRAMBLER TR5

30.5 cu.in. (500 c.c.) Vertical Twin OHV

SPEED TWIN 5T

30.5 cu.in. (500 c.c.) Vertical Twin OHV

TIGER CUB T20

(220 c.c.) Single Cylinder OHV

TERRIER T15

(150 c.c.) Single Cylinder OHV

T.T.

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Johnson Motors, Inc.

267 W. COLORADO ST., PASADENA 1, CALIF

The **TRIUMPH** Corporation

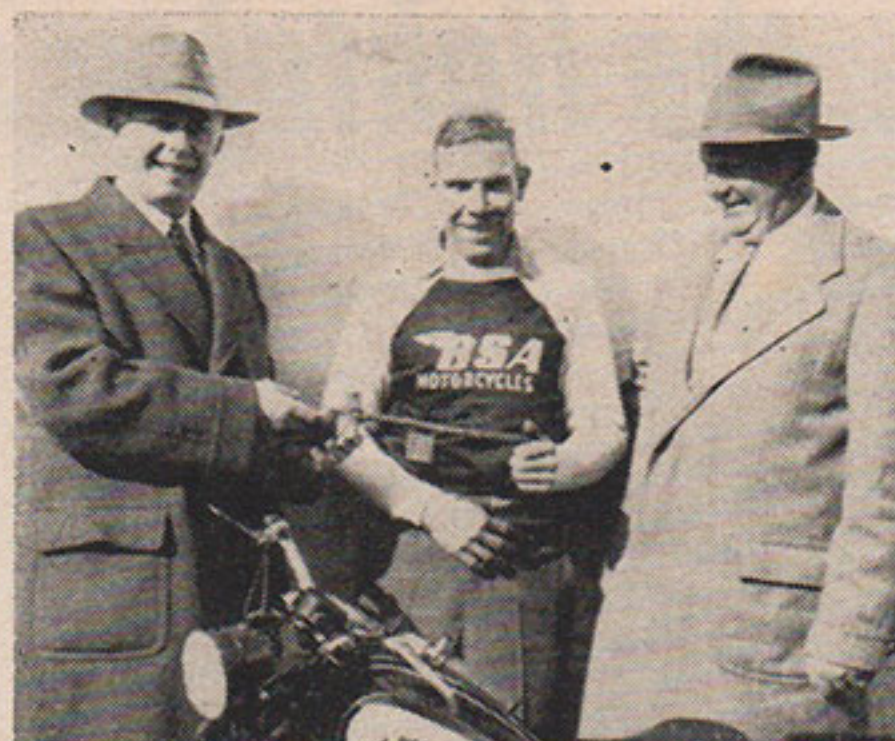
TOWSON, BALTIMORE 4, MARYLAND

SEE YOUR NEAREST TRIUMPH DEALER FOR DETAILS AND TERMS. TIME TO TRADE! ALL MAKES ACCEPTED.

(Continued from page 33)

- Oct. 14 Sporting TT Redlands Rd. Runners
- Oct. 14 Poker Run.....Pomona Slow Pokes
- Oct. 14 TT SteeplechaseRiverside
- Oct. 20 DEATH VALLEY RUN
- and 21
- Oct. 21 Sporting TTShamrocks
- Oct. 21 Hare Scrambles.....Double Packers
- Oct. 28 Hare & Hound.....Pico Hornets
- Oct. 28 Sporting TT.....20 Nite Owls
- Oct. 28 Hare Scrambles.....Missing Links
- Oct. 28 TT SteeplechaseRiverside
- Nov. 11 Sierra Trials Enduro.....Fresno
- Nov. 11 Hare & Hound.....Checkers
- Nov. 11 Hare & Hound.....Hi-Rollers
- Nov. 11 Poker Run.....Norwalk Centuars
- Nov. 11 Turkey Run.....Los Gauchos M.C.
- Nov. 18 Hare Scrambles.....Motor Jockeys
- Nov. 18 Hare & Hound.....49ers M.C.
- Nov. 25 Hare & Hound.....Rams M.C.
- Dec. 9 Jokers EnduroFresno
- Dec. 9 Hare & Hound.....North L.A. M.C.
- Dec. 9 Cactus Derby.....Riverside Bombers
- Dec. 16 Hare & Hound.....Sinners
- Jan. 13 Big Bear Run.....Orange Co. M.C.

Sports Committee District 37 Meets First Thursday of Month—8 P.P., Poplar Playground—Pepper St. off San Fernando Road. Send mail to—Jack Snyder, 5410 Charlotte, San Gabriel, Calif.



Cameron gets the Tomahawk! Here's Marion Cameron, BSA dealer in Lancaster, Pa. proudly displaying his trophy to T. A. Hodgdon (left) President of BSA Incorporated, and Walt Brown, Service Manager. Cameron, who rides BSA Bantam against all comers was to man in the recent running of this famous Enduro event.

1 inch

For only \$12.60, you can reach Thousands of CYCLE readers. Why not use this space to sell your merchandise? Send your ad copy and check to CYCLE Magazine, 1268 So. Alvarado St., Los Angeles 6, Calif.



EX-AIRMEN ON WHEELS

Employees of James Motor Cycles Ltd., Birmingham, England, who served in the Royal Air Force, recently revived service memories when they tried out a batch of new Comet 100 models ordered by the R.A.F. A large number of these lightweight motor cycles are now in use on Bomber Command Airfields. Gone are the days of waiting for the 'station waggon' or pedalling miles of windswept perimeter tracks—the airman of today has a lively 98 c.c. motor cycle complete with legshield and pannier bags. Enamelled in R.A.F. blue instead of maroon, these motor cycles are otherwise the same as the civilian James Comet 100.

Use This Blank For Your Swapping Post Ad

CYCLE Swapping Post
1268 S. Alvarado St., Los Angeles 6, Calif.

Enclosed please find \$2.00 ☐ cash ☐ check ☐ M.O. as payment for the following ad to appear in the next issue of CYCLE.

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THE SWAPPING POST

\$2.00 per single insertion.

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SELL—1948 Royal Enfield, 350 cc. Completely rebuilt engine. New chains, new tires and tubes. Handles well. \$175.00 or best offer. George Meeks, 164 Onderdonk Avenue, Manhasset, L. I., New York.

SELL—1955 Harley-Davidson 165. 1200 miles. Red, with saddle bags, windshield, stop light etc. Paid \$540. Take \$350. Selling because cannot ride at night due to impaired vision. James C. Barna, 277 Irving Terrace, Kenmore 23, New York.

WANTED—B & H or similar type foot shift for 1950 Harley "74," new or used. Send price list or C.O.D. Rolland Weatherby, 538 Allen Avenue, Alma, Michigan.

SELL—1950 Vincent Rapide, Shadow carbs, pistons. Powder blue paint. New Avon Tires. Rubber mounted Flanders bars. Sport fenders. Reversible sprockets. Top condition. \$450.00. P. Thompson, 35 Greenhill Rd., Broomall, Pennsylvania.

SELL—Vincent Rapide, 1952. A-1 shape. Must sacrifice. Phone 438-W. Douglas Columb, Clarion, Iowa.

FREE—Names and addresses of German motorcycle riders who are interested in corresponding with American riders. Just send stamped self-addressed envelope. J. M. Ritter Jr., 8714 Wick Place, Tampa, Florida.

SELL—1954 Matchless Scrambler. Lights and all road equipment. Very clean. \$500.00 including 1956 license plates and extra sprockets for trials. John Kehoe, 3039 Community Avenue, La Crescenta, California. Phone Churchill 9-3163.

WANTED—Chains for 4.00 x 19 tire. R. G. Thomas, 1331-B 46th St., Los Alamos, New Mexico.

WANTED—Gas tank, fenders and Schebler carburetor parts for 1916 Reading Standard motorcycle. Might consider other parts or might buy 1916 or 1917 Reading Standard motorcycle. Write Ralph W. Menzer, 1384 East 6th Street, Beaumont, California.

HARRY'S MOTORS

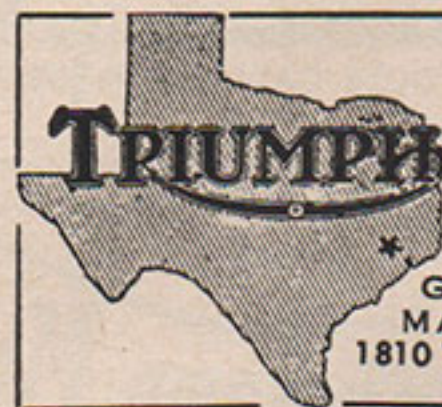
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Riders Kitter and Opel on the Zundapp KS-601 machine fitted with sidecar, were ONLY gold medal winners in their class.

STOP Looking—

GO ZUNDAPP in 1956



In the International Six Days Trials, Zundapp rider Lohse was awarded a Gold Medal for his splendid performance, here he is shown, as he rides his nimble and reliable Zundapp "Enduro" over the rough course in Czechoslovakia.

ZUNDAPP Quality

Every part of the Zundapp Motorcycle or Motor Scooter is made with precision and expert craftsmanship. Zundapp products enjoy a world-wide reputation based on sound engineering principles.

ZUNDAPP Parts

The International Motorcycle Co. maintain the largest spare parts department of any single independent motorcycle importer, with sub depots located in strategic points all over the forty-eight states.

ZUNDAPP Prices

There's no secret about Zundapp prices—the policy of the International Motorcycle Co. is to sell in large volume at a small profit. Assuring the rider, the most value for his money.

ZUNDAPP Models

- Bella 200cc w. Elec. starter...\$499
- Bella 150cc w. Kick starter... 399
- Challenger 200cc w. D. seed... 449
- Sabre 250cc... 469
- Motorcross 250cc 18-20 H.P. ... 549
- front & rear wheel 19"
- KS-601 600cc hyd. plunger ... 919
- KS-601 600cc R. sw. arm susp. 995

ZUNDAPP Performance

In the United States, as well as on the European Continent and in South America, Zundapp motorcycles have won more than their share of victories in all types of sporting competition.

ZUNDAPP Service

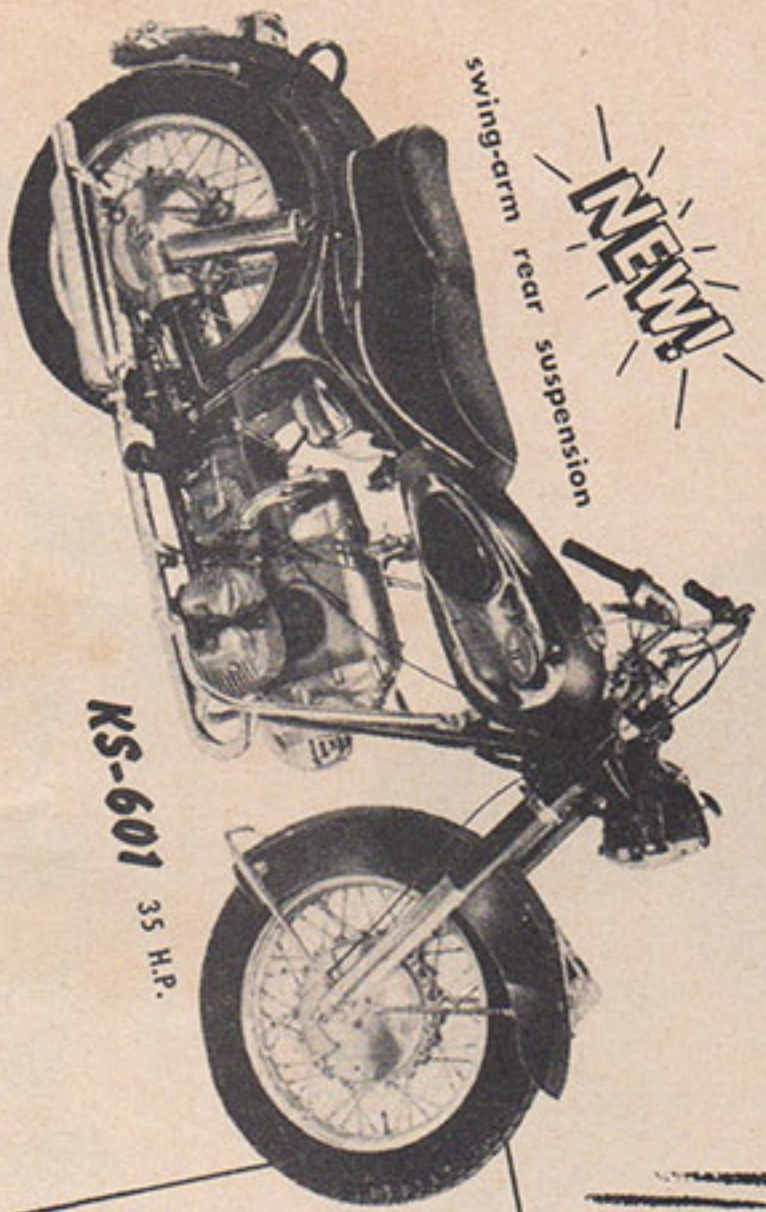
You can ride your Zundapp all around the world and you will find factory trained mechanics and dealers wherever you go—Zundapp has a network of 3000 experienced men, in almost every country to help you.

Write for FREE literature.

Prices F.O.B. N. Y.
Slight additional freight from
Houston and L. A. warehouses.

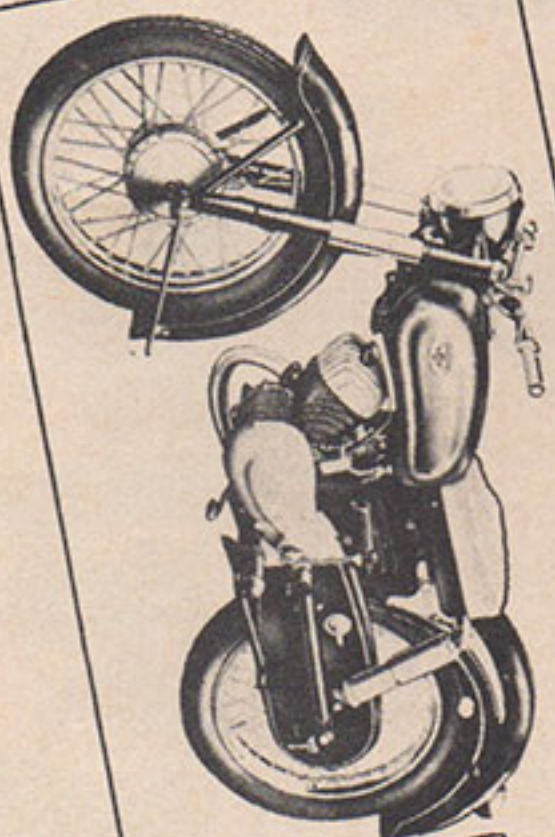
RIDERS

Test-ride the new, 1956 Zundapp "Big Twin"—the 600cc, opposed twin, with shaftdrive, over 35 horsepower and now equipped with full rear swing frame suspension—complete rear swinging arm suspension—assuring you the most comfortable ride at all speeds over all types of terrain!

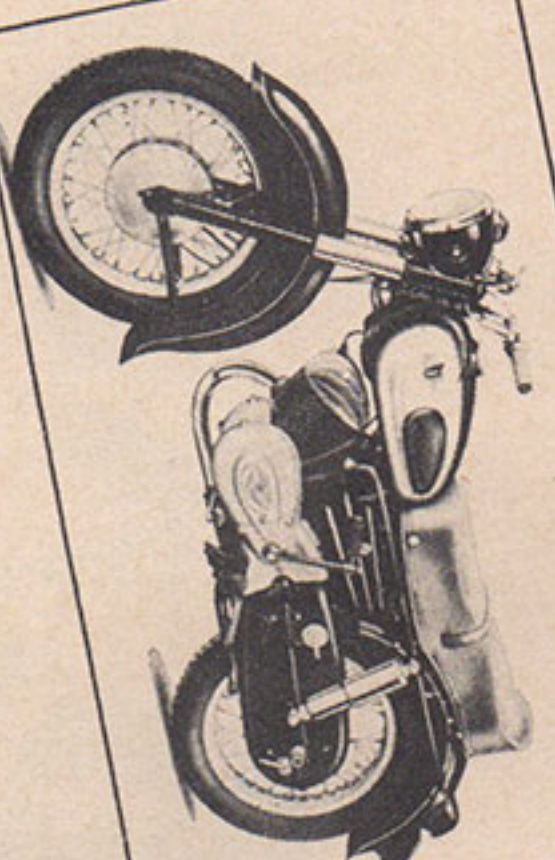


KS-601 35 H.P.

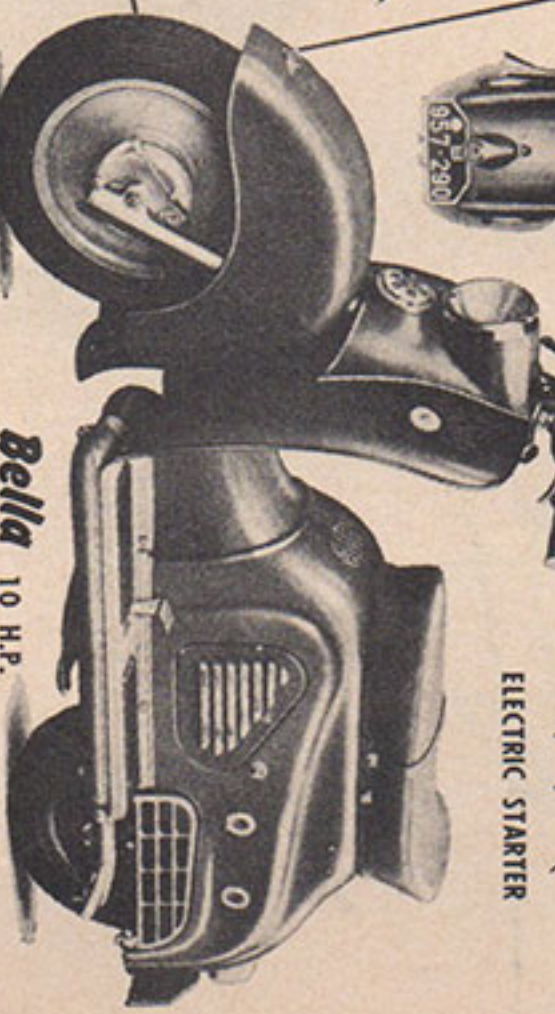
NEW!



NEW!



NEW!



Bella 10 H.P.

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SEE YOUR LOCAL ZUNDAPP MOTORCYCLE DEALER TODAY! Ride and choose the model of your choice—your dealer has a 1956 demonstrator in his shop.

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Dealer inquiries invited—Write today!
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For me and my gal



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