



Author, with .375 H&H Mauser, kneels beside his largest buffalo, shot in Mozambique. Hunter-tracker Luis holds Lott's .458 Win.

WHY MAGAZINE BIG-BORE RIFLES ARE BEST

From long experience, this writer has made up his mind.

By JACQUES P. LOTT

THE movie archetype of the African white professional hunter is Stewart Granger wearing a double Terai slouch hat and a bush jacket with half filled cartridge loops and carrying a British-style double rifle. This vision has substance, but many, if not most, of the great African professionals don't look like Rider Haggard's fictional hunter, Alan Quartermain, or Stewart Granger. They are too short, bald or otherwise unphotogenic and they carry bolt-action rifles which look familiar to most Americans.

A close look at an African Mauser-type rifle, however, shows characteristics foreign to most American hunters. The action will often have the square bridge of the later commercial Mausers. Some will have magnum actions $\frac{3}{8}$ " longer than standard. The trigger guard is enlarged and has a serrated release button inside it for the hinged floor plate. The first third of the barrel will usually have a rib containing a fixed "V" express sight plus a row of

two or three spring-loaded, folding leaves. The front sight will often have a folding sight protector, and the sight block will be set back from the muzzle as much as an inch. Sometimes the cocking piece will also sport a Holland, Rigby or Parker Hale "Sportarget" cocking piece sight. The grip cap will usually contain a trap for a spare front sight and the pistol grip will be longer and less curved than most U.S. versions.

The buttstock will be fairly straight and the fore-end will be shorter than U.S. fore-ends because there are no sling swivels on the fore-end. A sling stud may be mounted on a barrel band in front of the fore-end or on a sweated-on base in the same place. The sling will only be used for carrying the rifle, not shooting, and with the stud well forward the rifle will hang lower on the shoulder.

A look at the muzzle will reveal a hole somewhat smaller than .577" but usually larger than .375". Generally

it will be .404, .416 Rigby, .425 Westley Richards or .505 Gibbs if pre-war Africa and early post-war Africa.

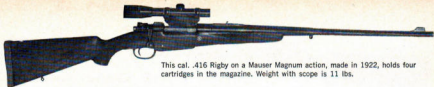
Since 1956, the .458 cartridge has become the phenomenon of tropical big game hunting. Like the .375 H & H Magnum, the .458 is a standard and available internationally.

Newer rifles will often be Winchester Model 70 .458's or possibly Mannlicher-Schoenauers in .458. These last found favor among professionals due to the four-round rotary magazine which with one in the chamber gives the hunter five shots, practically jam-proof. Some carry fancy Holland & Holland .458 Mausers, often made on salvaged pre-war commercial Mauser actions (at extra cost). There could be Schultz & Larsens or F.N., or Browning rifles, or B.S.A. or Remingtons. All those are, or were, available sometime since the introduction of the .458 Winchester Magnum in 1956.

The traditional British preeminence in arms for dangerous game has been successfully challenged, but not yet eclipsed. They are still much favored as producers of fine magazine and double rifles. However, the mainstream of clients and rifles for tropical big game hunting flows now from the United States. This is indeed a dramatic reversal, and Holland & Holland, that citadel of English-riflemaking, now concentrates on U.S. calibers—especially the .458—for dangerous game.

Workers in the U.S. large-bore field

PART I



This cal. .416 Rigby on a Mauser Magnum action, made in 1922, holds four cartridges in the magazine. Weight with scope is 11 lbs.

had settled on .450 caliber as "standard" years before the advent of the commercial .458. The writings of John "Pondoro" Taylor and the accepted British view that elephant rifle power begins with this caliber were deciding factors. The post-war U.S. safari client, however, was not the traditional "Pukka Sahib" type based on the style-setting and elegant career officers of the Indian Army who invariably carried double rifles. It is still common in Kenya to use the terms "Sahib" and "Memsahib" for Sir and Madame, they being Hindustani forms of address. And the idea of the double rifle stuck as well.

Not a few early American safari hunters imitated, outwardly at least, the concept, but with "Teddy" Roosevelt and Stewart Edward White and Charles Cottar, the Oklahoma frontiersman who became a great Kenya professional, our heresies began to assert their influence. Roosevelt was presented a Holland & Holland 500/450 double rifle, subscribed by a prestigious list of British sportsmen. As a lusty American, Roosevelt also carried a Model 95 Winchester lever action in .405 Winchester and a sporterized 1903 Springfield on his 1908 African expedition. His son Kermit used a Rigby double .450 Nitro-Express and a Winchester Model 95 in .30 Army (.30/40 Krag). The performance of the U.S. arms established the .405 and the '03 Springfield as effective lion and antelope rifles, with the .405 impressive on thin-skinned game at close range.

Later came Stewart Edward White's 1910 safari that clinched the reputation of the .405 and the .30/06 as African calibers. White had Ludwig Wundhammer of Los Angeles build him one of the first .30/06 sporters and soon gained a reputation as a crack shot and lion hunter. The .405 was responsible for some tragedies as men put too much faith in its 300 gr. bullet at 2200 f.p.s. It should have been 400 gr. at the same velocity to be adequate for heavy game. Charles Cottar was killed in 1940 by a Tanganyika cow rhino that those relatively light bullets failed to stop, and a well-known Dutch hunter from Java named Ledi-boor using the same type rifle was killed in East Africa by an elephant. Both had been warned often about the inadequacy of this caliber, the story goes.

In the 1920's, the New York firm of Griffin & Howe was formed. Their reputation for top quality magazine rifles rose rapidly and soon large-bore Mausers on magnum actions such as the .404 and the .505 Gibbs were added to their list of calibers. When James V. Howe left that firm and joined the Hoffman Arms Co. of Ohio, Hoffman began to produce fine .404's, .505's and .375's. Perhaps the finest large bore magazine rifle I have seen is a friend's Hoffman .505 Gibbs magnum Mauser in the British tradition with quarter rib, express sights and classic stock.

Until World War II most U.S. safari hunters relied on British-made rifles. This began to change in 1937 when Winchester introduced the Model 70 in .375 H & H Magnum caliber. This assured mass distribution of the rifle and ammo, and it became the ".30/06 of Africa" with Model 70's found from Bulawayo to Khartoum. Wally Johnson and Harry Manners killed between them some thousands of elephant and buffalo plus countless antelope and many lions between 1937 and 1960. They used pre-war Model 70 .375's and wore out several stocks apiece.

It was soon realized by post-war American riflemen that the 1917 Enfield action is a magnum-length action requiring minimal internal alteration to accept large cartridges such as the .416 Rigby and the .375 H & H Magnum. Without new magnum actions, one had this alternative, or extreme opening-up of '98 Mausers, or the location at considerable expense of a pre-war magnum Mauser action. The Enfield is cheap, rugged and reliable but requires a good deal of external modification and magazine work to make up into a functional dangerous game rifle.

Inevitably, some wildcatters took the .375 H & H case and developed elephant cartridges such as the .450 Watts and the .450 Ackley Magnum. These cartridges used Barnes copper tubing-jacketed soft nose and solid bullets that will not shatter and gave maximum penetration of heavy game. The only criticisms heard were that some of the .049" jacket soft nosed were too stiffly constructed. Barnes .032" jackets remedied this.

During the middle 1950's southern California had a flurry of .416 building on 1917 Enfield and Pattern '14 actions. Alex Kerr's Beverly Hills Sport

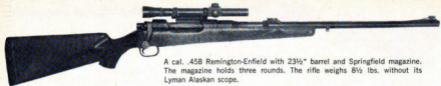
Shop turned out some very sound .416's using Apex barrels. I owned one of these California .416's made by Apex and stocked by Monty Kennedy which was as accurate and smooth functioning a large-bore as one could desire.

Some of the early U.S. .450 magnums were shaky things when made by gunsmiths who had never built up anything heavier than a .300 Magnum. I saw one such effort after it had returned from Africa. It was a .450 Watts on an Enfield action that had literally hammered its stock to splinters. Porous Claro and other open-grained American walnut are unsuited for such heavy recoiling rifles, and more French walnut and a few mesquite stocks appeared. The single recoil lug on the receiver was abandoned for dual lugs, one attached to the barrel and set into the fore-end with both often epoxy bedded. The splitting problem was thus cured.

Subsequent experience confirmed the correctness of the British velocity range for large bores when bullets striking at unduly high velocities penetrated poorly. A friend's .416 when loaded substantially over the factory velocity of 2371 f.p.s. lacked penetration. Atkinson & Marquardt of Prescott, Ariz., began turning out a variety of large-bore barrels, adding at extra cost an integral recoil lug. I have such a barrel on my favorite .458 which delivers consistent accuracy, hardly varying in point of impact. A & M became quite a large bore center, producing various wildcat heavies, including their enormous .475 A & M using .475" Barnes bullets from 500 to 600 grs. and a necked-up .378 Weatherby case, claiming 2980 f.p.s. with 110 grs. of 3031 and a 500 gr. bullet.

A number of these rather homely but businesslike Enfield heavies made good in Africa, although many loads were poorly selected for velocity, and if not heavily crimped and bullets seated to proper depth, jams would occur.

Winchester apparently was watching all this activity, which received ample coverage in shooting publications. The popularity of the .450 magnums and the availability of the .375 H & H case added up to another opportunity. This was seized, and the .458 Winchester Magnum, based on a shortened belted case, was born in 1956. The new case was but 2 1/2" long as compared to the



A cal. .458 Remington-Enfield with 23½" barrel and Springfield magazine. The magazine holds three rounds. The rifle weighs 8½ lbs. without its Lyman Alaskan scope.

3½" case of the .475 #2 of almost equal power. The rifle, called the .458 "African", was a hybrid of U.S. and British external features built around the proven Model 70 action. Wisely, Winchester placed the forward sling swivel stud on the barrel ahead of the forearm to preclude painful blows to the left hand when 75 ft.-lbs. of recoil forces the rifle back. The buttstock and forearm were conservative, rugged and functional. It is remarkable that few owners of Win. 458's customize their stocks other than length of pull, indicating that the design meets with approval for steady holding and quick handling plus recoil comfort. The rear sight was an appropriate combination of a solid base, offering windage and elevation adjustment, with a wide "V" express-type open blade.

At first, Winchester used only one recoil bolt behind the single recoil lug on the receiver. This was found inadequate, and a heavy lug was brazed to the barrel and inletted into the fore-end and another stock bolt was installed in the web between the trigger and the magazine mortises. This combined with the overall excellent features of the .458 African clinched its evolution into a first-rate stopping rifle, fully competitive with the best British products and eagerly sought by professionals and sportsmen who could afford a double rifle costing many times the price of the Model 70.

As important as the rifle itself was the success of the cartridge in soft-nosed and solid versions, with the solid equalling the fine reputation of that pioneer of the steel-jacketed solid, the .416 Rigby. The combination of the long, heavy 500 gr. bullet with a small case created some initial difficulties in that a special fine-grained powder was required to attain full velocity of 2130 f.p.s. This charge had to be heavily compressed in the solid version, which bullet is some 3/32" longer than the soft-nose.

The Model 70 .458 African proved it could not only dish it out but that it could take it as well. In many respects it is more important for the elephant rifle to be able to take hard knocks than offer any unusual ballistic qualities. Double rifles are beautifully made but suffer from broken stocks

more than bolt rifles, due either to the sidelock stock being little more than four fingers of walnut around the locks, or to loosening in the box lock stock, where the action and tang tend to wedge themselves to the rear, spreading the side panels apart. Many older box lock doubles will reveal this if held straight up by the butt and shaken deliberately. A replacement stock for a double will cost more than a .458. One can purchase an extra factory stock for the .458, plus spare striker, firing pin and mainspring and magazine spring without financial strain.

I own or have owned a wide variety of excellent double rifles. I have found most of them quite accurate and have improved the grouping of some with careful handloading. My .577 Holland will consistently place both barrels in 1½" at 50 yds. using the express sights and firing from a standing rest. This rifle is theoretically my "ultimate stopper" because of its caliber and will be used for tight spots in thick cover. I have a .500-3" Evans double that will stay in about 1" at 50 yds. from a rest.

Still, I recall that the barrels of my Lancaster 475 #2 began to separate at the muzzle and the stock was a replacement for the original and that this also had to be replaced a second time. I know of one Holland .465 #2 grade double that had the barrels separate in Africa and which the factory replaced. Preparing for a hunt in Sumatra in 1968, I was at the range with my Holland Royal 465 double and heard a nasty click as I tried the right lock with "snap caps". I tried to open the rifle and found I couldn't, whereupon I removed the right lock and found the stirrup to be broken and a loose piece of this delicate part lodged under the cocking lever, preventing opening of the rifle. Had this occurred in a tight spot on the second shot I would have tried to force the barrels down with resultant damage to the locks, apart from what else might have happened. One does not always have a single shot if one side of a double fails unless one can sit down and carefully remove offending bits and pieces.

Another friend aimed his double rifle at an elephant in Uganda and heard only a sickly click upon squeezing the

right trigger. He didn't realize what had occurred at first and tried to shoot a couple of more times when it dawned on him he had a broken main spring. Many doubles are quite elderly (this rifle was made in 1912) and this adds up to a risk of metal fatigue or crystallization. This is not to detract from the reputation of doubles or their makers, but solely to point out that being man-made mechanical things, they are imperfect. Most claims made for their alleged perfection are based upon a theoretical list of possible breakdowns of the bolt rifle and consequent non-breakdown of the double.

In my experience with the bolt action rifle, these breakdowns have yet to occur though I have fired thousands of rounds with all sorts of them, while confounding and serious difficulties have been experienced with doubles personally or by acquaintances. Further, it is difficult to reload the double without taking eyes off the game and the barrels must be lowered greatly as compared with the bolt rifle which may be held forward and loaded without removing one's eyes from the game. Beyond the double's ability to fire two quick shots with little possibility of a contrempe, the shorter overall length for a given barrel length, its ability to handle a .577 for ultimate stopping and its quick take-down for packing, I can't see any superiority of the double over a first-class bolt action rifle unless one falls back on those *theoretical* mechanical failures.



The .458 cartridge (r.) is designed for use in bolt-action rifles, whereas the other three are fired in double-barreled rifles. They are (from l.) the .600 Nitro-Express, the .577 Nitro-Express and the .465 Nitro-Express.

To assert that most professional hunters or even most of the great ones preferred doubles is a cliché and a fallacy. It is true that the late John "Pondoro" Taylor touted the double as a *sine qua non* for dangerous game as do Elmer Keith and others, but Taylor's friend, the late Fletcher Jamieson, the Rhodesian professional electrocuted by a drop light while repairing a pump in his well in 1948, used a Holland .500/.450 double only until Jeffery made him one of their big .500 Jeffery Magnum Mausers. He preferred this rifle to any double and was most successful with it in the Zambesi Valley, substantially increasing his score. Capt. F. C. Selous, D.S.O. and king of all the African hunters, preferred a .461 Gibbs-Farquharson single-shot and had relied previously on 4-bore percussion single-shots. Like many African hunters of the Victorian era, he avoided double rifles except for a brief ownership of one that was shortly stolen and a 10-bore which cross-fired. When the smokeless era arrived, Selous quickly obtained a 6.5 mm. Rumanian Mannlicher and a .375 Express Holland single-shot Farquharson, switching to a .275 H & H Magnum and a .425 Westley Richards Mauser as his heavy shortly before the first World War in which he was killed.

Failure of rebated rim loads

Selous tried out the .450 Rigby double, introduced in 1897 as the first of the large nitro-expresses, and liked the cartridge, but didn't care for doubles. I want to point out that, despite Selous' success with the .425 and its use by some African game departments, Rhodesia ceased use of this rebated-rim cartridge for game rangers due to the tendency of the bolt face to slip over the rim during feeding and force a groove down the cartridge case, jamming the rifle and failing to feed a round into the chamber. John Taylor seems to have repeated a fallacy about this cartridge, which he liked, by stating that these rifles had a reputation for having weak magazine springs that sometimes failed to push the cartridge up enough to feed it. Westley Richards did feature extra long magazines that would have some effect on spring tension, but the problem was the rebated rim, also common to the now-obsolete .500 Jeffery rimless. This, like all Schuler-designed cartridges, had a rebated rim. One Rhodesian ranger resigned rather than continue using the .425 after a close shave. The .425's were later re-issued to the Tsetse Fly Control

staff, who soon resented this generosity.

It has been said that the .500 Jeffery was only chambered in English rifles and the ammo made in Germany. The latter is true, but in Germany it was also known as the 12.7 x 70 mm. Schuler and rifles made by Krieghoff were sold prior to World War II, after which this cartridge ceased to be produced. Current owners of Jeffery .500's or the Krieghoff version often convert to .416, .505, .378 or .460 Weatherby.

W.D.M. "Karamojo" Bell was famous for his use of the 7 x 57 mm. Rigby Mauser although he ended up preferring the .318 Westley Richards Mauser. His choice of caliber would be illegal and dangerous under today's conditions, but he didn't use double rifles. Phillip Percival, long President of the East African Professional Hunter's Association, who met Roosevelt in 1908, preferred a .505 Gibbs. Percival was widely regarded as the dean of East African professionals.

Now-retired Kenya professional Eric Rundgren was credited by the late Robert Ruark with killing some 600 elephants on control using the .416 Rigby. When in Botswana in 1963, I met Mike Cameron, Rundgren's protégé, who was carrying Rundgren's final choice, a Winchester Model 70 .458. The recently deceased Commander David Enderby Blunt went out to Tanganyika after World War I and became one of the pioneers of the elephant control scheme. Blunt confounded old-timers with his successful use of his .416 Rigby Mauser. Blunt's old .416 carries on in the hands of his son.

The two leading elephant control rangers in Rhodesia in 1964 were "Donnie" Jan Bredenkamp and W. Middleton "Lofty" Stokes, respectively Chief Rangers, Wankie Controlled Hunting Area and the Zambesi Controlled Hunting Areas. Both preferred the .458 by Mannlicher. The famous ivory hunter Marcus Daly preferred the .404 Jeffery, the .416 and the 10.75 x 68 to any double. Neither Wally Johnson, Sr., nor his son Walter Jr., would be caught dead using double rifles and aver that in some instances one or the other would have been so caught with a two-shot double instead of a powerful magazine rifle with four or five shots. Both consider a 10-shot .458 the potentially ideal elephant rifle and are only half joking.

Wally exchanged his old Model 70 .375 for a .458 after a nasty duel with a snared buffalo which charged his clients in 1970. The pain-maddened buffalo, his neck cruelly cut by a poacher's wire, took a couple of .458's and two of Wally's .375's. Wally, in

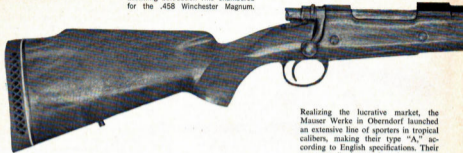
front, readied his third shot but it was never delivered because the buff crashed into the muzzle, knocking the rifle from Wally's hands, breaking the stock and hurting Wally's right hand somewhat. Down went Wally with the buff working on him. One of the clients was using a .458 Browning and fired one shot, missing the buff in the melee, then found his floor-plate had opened from recoil, releasing the spring catch. Jerry Knight, who manages the gun department at Kerr's Sport Shop in Beverly Hills, Calif., ran up and pumped in a couple of .458 solids, one of which severed the buffalo's spine just forward of the shoulders. Wally got a horn through his thigh.

Injury not always avoidable

Sometimes it isn't possible to avoid injury to a guide or the client. Wally Johnson saved my life when a buffalo I had wounded attacked me on Sept. 18, 1959, in Mozambique along the Revui River. I had wounded it at 40 yds. with a .458 soft and a solid. The soft had caught him in the ribs and went into his paunch. The second shot broke his right shoulder but deflected. The buffalo circled back in thick bush and took me from the left rear. Before Wally could shoot with the .375 he was carrying, the buff tossed me up through the thorns three times. Wally delivered seven shots from the Holland .375, then ran up to where I was lying on the sand, asking breathlessly for my .458. He put a soft nose .458 in the neck that didn't faze the buff and then one in the back of the head which blew open the brain box. I was badly banged up. If you are shocked at the 11 shots it took to put down the buff, I must say this is not unusual. The incredibly tough Cape buffalo is famous for being able to absorb heavy lead.

From this experience, I decided never again to load alternating soft nose and solids. I load the heavy rifle with solids always, unless the target is a lion or tiger. The normal bullet for the large bore is the solid, which is the only bullet capable of reaching the vitals of pachyderms from any practical angle. A crucial factor is that soft nose rounds deform rapidly when left in the magazine for two or three shots. If left in the magazine to be used later they may well cause a jam from mushrooming. Solids can be left with the knowledge that they will not batter and will always feed. I always remove any soft nose rounds left in the magazine after firing and place them on top for the next shot or remove them to my belt (*To be concluded*).

Browning bolt-action rifle chambered for the .458 Winchester Magnum.



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THE choices of large-bore magazine rifles available today are sufficiently varied to meet any requirements. The Model 70 .458 Winchester has been improved from the post-'64 model to a very effective rifle with a shorter barrel 22" long. I do not object to 24" or 25" for the heavy rifle since it is steadying for offhand work and not the brush catcher claimed. The shorter barrel will not result in any significant loss of velocity, however. The Browning no longer carries a bolt guide, and, if the bolt is worked rapidly and moves too far to the side, will cramp and bind. A tighter fit of bolt to receiver would reduce this tendency. The new F.N. Mausers have apparently the same basic action since they also are made by F.N. in Belgium.

A new or used factory rifle such as the Winchester should do nicely in .458 unless one desires to spend a good bit more for a custom job ranging from the posh creations of Griffin & Howe or Holland & Holland to the work of individual gunsmiths or even a homemade job by the skilled amateur. The tremendously powerful .460 Weatherby is available for left or right handers who want to achieve the ultimate velocity from a .458 bullet and do not mind a heavier rifle and more expensive ammo. I find its 2700 f.p.s. velocity well beyond that required for optimum performance on dangerous game, which

I would place at around 2300 f.p.s. The .416 Rigby is always a fine choice for those who find the big .40's enough gun. Whenever used magnum actions or the discontinued Brevex magnum actions can be obtained, Rigby will oblige by building a .416.

The plentiful '14 and '17 Enfields are available for those who don't insist on pure Mauser. The late M. Polonsky, who manufactured the Brevex, made his fine action to accept the .505 Gibbs, and his action is larger in bulk than the Mauser magnum. Such actions will come high to those who can find them since neither one is currently manufactured. Mauser actions have a lot of virtues desirable in a large-bore. The big extractor takes a healthy bite on the case rim, making for dependable extraction. The bolt can be disassembled for cleaning or replacement of parts in seconds without tools by turning that slow but wonderfully positive 180° military-type safety to the vertical position and unscrewing the bolt sleeve.

Mauser paradoxically came into the big game rifle business only after the British had made the Mauser action famous in their sporting rifles, especially Rigby and Jeffery. The Germans had concentrated on the export of Mausers for military use, while the British developed and made famous the 7 mm. Rigby (.276), the .416 Rigby, the .350 Rigby, the .404 Jeffery and others.

PART II

Realizing the lucrative market, the Mauser Werke in Oberndorf launched an extensive line of sporters in tropical calibers, making their type "A," according to English specifications. Their own contribution to large-bore magazine calibers was the 10.75 x 68 mm., using a 347-gr. bullet at some 2200 f.p.s. as an all-around choice. The 10.75 had great appeal owing to its light weight and five-shot magazine, which with one in the chamber provided six shots. It was found wanting in penetration but was quite effective on lion and tiger and would turn elephant or rhino. This lack of penetration was more due to thin jackets than lack of sectional density, although this is minimal, of course.

The current British loadings of the .404 have been upped to compete with the D.W.M. .404 loading of 2330 f.p.s. almost equalling the .416. Current Kynoch brass has Boxer priming. The .404 has for years been the favorite game ranger caliber for African game departments. Users of the .416 can obtain Boxer-primed brass by purchasing .378 Weatherby cases, turning off the belts and loading with magnum primers and Barnes bullets. Barnes has sold out



Some big-bore cartridges for which magazine rifles are chambered are (l. to r.) the .458 Winchester Magnum, .404 Nitro-Express, 10.75x68 mm., .460 Weatherby Magnum, and the .505 Gibbs.

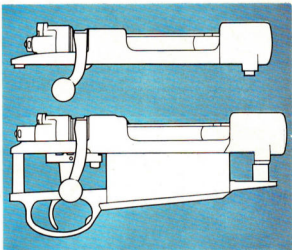
to Colorado Custom Bullets, Route 1, Box 507-B, Montrose, Colo. 81401. They have a very complete list of bullets right up to the .577 and the .600.

Choice of one of the big .40's, a .458 Win. or wildcat or .460 Weatherby on up to the .475 A & M or the .500 Buhmiller on the same case depends on whether one is willing to depend entirely on handloads and also on the type of game and country to be hunted. For general use the .40 and up to .423 (.404) calibers will perform admirably, but fall short of the .458's for close work in thicker cover, though they, too, will perform adequately. There is no denying that the larger the frontal area of a bullet combined with great sectional density and strong steel jackets, the greater its "knockdown" of elephant, buffalo and rhino. This is particularly true on elephant for shots that miss the brain closely. From the .458 on up to the .577 in doubles this shot will tend to floor the elephant and knock him out long enough for a second or third shot to be fired.

It all depends on how much insurance against a charge is wanted. If no charge occurs, then anything from a .375 on up will suffice. This is one of the unpredictable in modern African hunting. Many wounded animals are walking about some areas due to poachers.

Those contemplating the building of a large-bore bolt-action rifle should avoid gimmicks and see that the stock is made of dense wood with no fancy grain in the grip area. It must be shaped for firm holding, recoil and fast handling with sufficient butt area and firm neoprene pad to absorb kick. French walnut, hard American walnut, and some mesquite blanks make into fine large-bore stocks. I avoid Monte Carlo type stocks on such rifles and prefer very straight combs and longer, more gradual pistol grips. Such stocks keep the cheek from slipping away and yet do not hurt it, allowing the eye to remain as aligned as possible with the sights regardless of where the cheek supports the stock.

I find that 13½"-14" pulls are perfect for rapid working of the bolt from the shoulder, which one should master to be effective with the bolt-action rifle for dangerous game. The forearm should be full enough to permit a firm



Standard length FN Mauser bolt and receiver assembly (top) compared with a Brevev Magnum Mauser action. Brevev action is ½" longer and has a larger recoil lug, but is of conventional Mauser design.

grip and short enough to clear the barrel band or stud holding the sling. If the pistol grip is too short and arched down excessively, the hand will be too close to the bolt knob and the bolt sleeve when firing, and therefore one should not sweep the bolt backwards unduly, either. The bolt knob should be well clear of the hand and protruding enough to let the shooter grab it unflinchingly.

Button floor plate releases inside the trigger guard are fine if the catch has enough engagement and the spring is strong enough to overcome the tendency of recoil to open it. The latter can be usually remedied by drilling out the spring hole and installing a stiffer spring of larger diameter. It is not the index finger recoiling forward that releases these catches.

I had warned Wally Johnson's client about this tendency of F.N.-type magazine cover catches to release in .458's before Wally was borned. A doctor friend in Kenya had his floor plate do

the same trick, also while shooting at a wounded buffalo. Pinning the floor plates shut, a heavier coil spring, or perhaps more overlap in the catch will usually cure it. I understand that current Brownings have the release catch pinned or fastened to render it inoperative.

Choosing sights

Rather than have an integral recoil lug turned on the barrel, I prefer to make up a barrel band containing the extra lug on the bottom and an express sight base on top with a dovetail to accommodate a tool steel blank vertical rear standard, sloping slightly forward on its rear face. I file this in at the range to a front sight which is often a "sourdough" type sight of my own manufacture, with silver solder bead. When filed in, I engrave a vertical line on the rear face of the rear sight and fill with low temperature silver solder which leaves a permanent vertical line

as with the English express sights. Very little sight radius is required for accuracy, and for quick resolution of the rear sight the placement should be not less than 24" from the butt and more if required. Some will want to use a Parker Hale "Sportarget" cocking piece sight. I do not find these sights at all inaccurate and they are the least liable of all peeps to be damaged. A receiver sight such as the Lyman 48 will suffice, but it is susceptible to blows capable of stripping the screws or breaking them.

A quality scope of low power, mounted strongly on a good side mount like the Griffin & Howe or their top mount on a quarter rib will take the recoil and allow quick detachability. The side mount is screwed and pinned for maximum strength and allows full use of the open sights when removed. The G & H top mount is also suitable and rugged, but few mounts provide both the strength required by such heavy recoiling rifles and a clear re-

Griffin & Howe lever, replacing the soft Jaeger lever that had a tendency to bend, preventing removal of scope. The eye relief is very long. I have also had success with the Lyman All-American in 2½X. Heavy recoil will jar many otherwise fine scopes loose, and I cannot emphasize too strongly the need to range-test the scope for internal weaknesses before a hunt. No scope of over 2½X should be used and only those of better quality. After careful trial positioning of scope in rings, some masking tape may be applied on tube adjacent to ring and an index mark drawn in ink. After the scope and rings are degreased with acetone or solvent and Loctite or epoxy applied, the line on tape can be aligned with split in rings. Omitting cementing of rings and mount or receiver sight screws will surely result in loosening with recoil. Four to five inches of eye relief is about right if one doesn't like a cookie cutter in the eye via 75 ft.-lbs. of recoil.

By scoping the .458, I have another

probably angle up too steeply towards the chamber and run into the receiver wall. The rails can be opened up a bit forward so the head of the case is out of the magazine and on the follower by the time the bolt is halfway home. Magazine boxes must sometimes be milled out to accommodate the fatter cases. A magazine should be lengthened as much to the rear as possible before removing metal at the front. This is all work for the professional or advanced amateur. *All owners should repeatedly attempt to create jams by removing cocking piece and firing pin, and working rounds through the action briskly. Any tendency to jam from rounds fed from one side or the other should be noted and the feed ramp or rails fixed.*

The cocking cams of the bolt should be well polished and unnecessary tension of the extractor spring on Mauser-type actions should be lightened to allow smoother operation of the bolt. This can be done by springing the extractor between the fingers to remove some of the extra bow which is not needed. I want the bolt handle to snap down by spring action when lifted almost to cocking height. The extractor should snap over the rim of a cartridge case when a single round is slipped in the chamber in emergencies. This may require some very skilled and careful hand grinding and polishing in beveling the forward face of the extractor hook.

Adjustable triggers avoided

Bulky adjustable triggers, full of hair springs and set screws and requiring extra inletting, should be avoided. The Model 70 trigger is quite foolproof, and a properly altered military trigger or the plain two-stage trigger will work fine. I dislike aluminum on any such rifle because of its tendency to brighten and its softness compared to steel. Nor do I need its lightness.

With a rifle of the quality and calibers I describe, reasonably skilled in its operation and with the right bullets for the job, the hunter is ready for anything that walks the earth and will have two or more rounds left when the double would be empty. American gunsmiths have brought the heavy magazine rifle to a level not previously imagined in a field deemed the exclusive hunting preserve of the double. The basic forms and calibers were pioneered by the British, but we have brought the work they began to a peak that means more power and more shots from a lighter rifle, delivered more accurately and at greatly lessened investment of time and money. ■



The Winchester Model 70 African in .458, shown at top here in its pre-1968 version, is one magazine big-bore rifle American shooters can obtain easily. Weatherby's Mark V, shown below in .300 Weatherby, is available from U.S. gun stores in .460 Weatherby, which moves a 500-gr. .458 bullet at several hundred f.p.s. faster than the standard .458. The .460 rifle is identical to the .300 shown, save for a much heavier barrel.



ceiver for open sights. One chap took his .458 to Kenya after removing the open sights. He screwed the popular mount on with standard screws provided, and the .458 actually sheared off the screws when fired early in the safari, and he had no open sights to rely on. Heavy rifles should always carry open sights and be precisely sighted with them. I like a bit of level flat on top of my open "V" express sight for an elevation reference plane that cuts down on the overshooting that is so common when open sights are used in poor light.

I use an old G.I. Lyman Alaskan on my Jaeger-Enfield .458 with a modified Jaeger mount to which I added a

general purpose rifle capable of taking game out to 200 yards. It is also handy for night shooting or cats on bait in the early morning or evening. This combination of precision plus the large bore must be experienced to be fully appreciated. When tracking time is limited in the late afternoon, I use the .458 for everything and obtain quicker kills than with the .375 with equal placement.

Reliable feeding must be incorporated into the bolt rifle or it is worse than dangerous. Sometimes the feed ramp must be ground out a bit in the middle or on one side or the other with a hand grinder. If a round pops out of the magazine rails a bit late, it will