MARCH 1958 50c

FINEST IN THE FIREARMS FIELD

Guns

HUNTING • SHOOTING • ADVENTURE

KEITH ON BIG BULLETS

ELI WHITNEY • Father of the interchangeability of gun parts

THE GUNSMITH TOO TOUGH TO DIE

HOW YOU CAN BE A "TRICK" SHOOTER

Guns • Ammo • Guns • Ammo

Ye Old Hunter is all heart!

WARNING! American shooters! You may subject yourself to U. S. excise tax and other liability in purchasing your guns from non-American sources!

★ AMERICA'S GREATEST SHOOTER'S BARGAINS

SAYS: Here's Ze Rifle of Ze Month!

NORWAY'S MOUNTAIN MASTERPIECE!

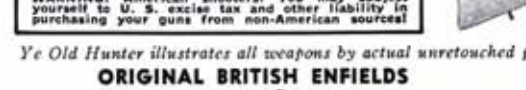
Only $19.95

Original Norwegian Krag Carbines, Cal. 6.5mm

No, it had to come! Ye Old Hunter was shocked at the crazy prices others are asking for this fabulous precision Krag carbine, so fought his way up hills, fjord and glacier, a deal to benefit all American shooters! ORIGINAL NORWEGIAN KRAG CARBINES in perfect operating condition for only $19.95! These rifles have been prized by Scandinavian shooters for generations and were the key stone of Norwegian resistance forces during World War II as their deadly whining bullets fired with fantastic accuracy kept the Germans on the run for five years of occupation. Ach, Himmel, ist der Krag again! many a German was heard to mutter in those days. Now Ye Old Hunter brings this magnificent Krag carbine to American shooters at last at world's lowest prices. Don't confuse this with the crummy Norwegian Krag long rifles which you may see elsewhere or with U. S. Krags. Buy only imported Krags and look for quality metal work and fitting. All rifles are complete and tight and with desirable "salt and pepper" bores which means that where the salt did not pit the pepper did. Order today as this bargain just cannot last!!! Original issue Norwegian Krag Ammo 6.5mm only $5.45 per 100. Cheapest price in U.S.A.! Ye Old Hunter is all gall!

Ye Old Hunter illustrates all weapons by actual unretouched photographs so you can see how they REALLY look!

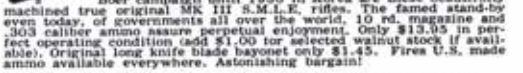
ORIGINAL BRITISH ENFIELDS



CAL. 303 ONLY $13.95

The pride of the British Army in all wars from 1900's Boer campaign until 1950 in Korea are these beautifully machined true original MK III S.M.L.E. rifles. The famed stand-by even today, of governments all over the world, 10 rd. magazine and .303 caliber ammo assure perpetual enjoyment. Only $13.95 in perfect operating condition. (add $1.00 for selected walnut stock if available). Original long knife blade bayonet only $1.45. Fires U.S. made ammo available everywhere. Astonishing bargain!

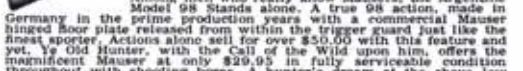
RARE MODEL 98 ARGENTINE MAUSERS



CAL. .30 (7.65MM) ONLY $29.95

Among men who really know Mausers, the Argentine Model 98 Stands alone. A true 98 action, made in Germany in the prime production years with a commercial Mauser hinged floor plate released from within the trigger guard just like the finest sporter. Actions alone sell for over $50.00 with this feature and yet, Ye Old Hunter, with the Call of the Wild upon him, offers the magnificent Mauser at only $29.95 in fully serviceable condition throughout with shooting bores. A hunter's dream at the above low price. A post war selection of original 7.65mm (cal. 30) Argentine ball ammo at only $5.50 per hundred to function flawlessly in these magnificent rifles. **Order today!** Going fast.

RARE M93 SPANISH LONG RANGE MAUSERS!

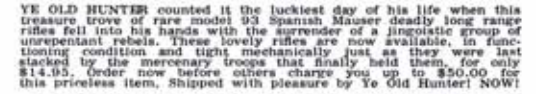


Huge new shipment just received

CAL. 7MM MAUSER—ONLY $14.95

YE OLD HUNTER counted it the luckiest day of his life when this treasure trove of rare model 93 Spanish Mauser deadly long range rifles fell into his hands with the surrender of a jingoistic group of unrepentant rebels. These lovely rifles are now available, in functioning condition and tight mechanically just as they were last stacked by the mercenary troops that finally held them, for only $14.95. Order now before others charge you up to $50.00 for this priceless item. Shipped with pleasure by Ye Old Hunter! NOW!

ORIGINAL MAUSER MODEL 71/84 "BIG 11"



Cal. 11MM Mauser Only $9.95

When this one speaks, there's thunder in the hills! Yes, Ye Old Hunter cornered a tiny reject supply of fabulous Mauser "Big 11's" and now dumps them on you at a crazy low price to plague you forever. Don't confuse these Mausers with those being offered elsewhere —these are really awful, but with a bit of steel wool dipped in sulphuric acid handled with atom gloves they will clean up potentially to NRA Fair as they are complete in every detail and begging for tender loving care! Save with Ye Old Hunter most!!

PANCHO VILLA SPECIAL!!!

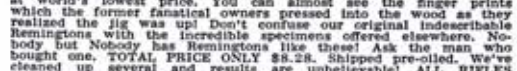
CAL. 7MM REMINGTON ROLLING BLOCKS

ONLY 92¢ per lb.!!!

Total Price Only $8.28

Remingtons, Remingtons, whose got the Remingtons? Ye Old Hunter, of course, and at bargain giveaway prices within the reach of everyone. Look at this steal—original 7mm Remingtons in "gun crank condition" (see below) the perfect companion piece to the noble 43's listed below at world's lowest price. You can almost see the finger prints which the former fanatical owners pressed into the wood as they realized the jig was up! Don't confuse our original indescribable Remingtons with the incredible specimens offered elsewhere. Nobody but Nobody has Remingtons like these! Ask the man who bought one. TOTAL PRICE ONLY $8.28. Shipped pre-oiled. We've cleaned up several and results are unbelievable! ALL RIFLES GUARANTEED COMPLETE AND IN "GUN CRANK CONDITION" (Minimum order 9 lbs.) A few elite Old Hunter hand picked glowing specimens at $1.12 per lb.—or only $10.08. Ye Old Hunter has now located a few original bayonets for these jewels at only $1.95 each for "Long Tooth" type or $2.45 each for ultra-rare "Short Tooth" type. These bayonets are the famed knife-blade variety which gleamed about many revolutionary camp fires in days of yore. Pick your teeth on the Revolutionists' favorite. NOW!

FAMED .43 ORIGINAL REM. ROLLING BLOCKS



Wt. 9 lbs. ONLY 62¢ per lb.

Total Price Only $5.58

UNBELIEVABLE!?? YES, except from Ye Old Hunter it WOULD be unbelievable, for who else would DARE to make such an offer. COMPLETE ORIGINAL REMINGTON rolling block rifles for only 62¢ per lb.!! The most unbelievable gun giveaway in the U.S.A.!! FANTASTIC? NO, not from Ye Old Hunter, America's greatest gun bargain house. You can't buy prime hamburger at this price, so load up on this precedent shattering bargain NOW! Condition of all rifles is 'gun crank special' which means that the outline of the rifle is clearly visible through the rust and you can see light through the bore. You will need a little of that old elbow grease to restore these to "NRA FAIR condition", but, at this price, who cares? "AS IS" rifles. Only rusty Remingtons in this caliber available anywhere: these crackled with conquest in the hands of fanatical Latin hordes who had smuggled them out of the U. S. to gain power and glory for their lost causes. Finest rifle bargain in America for the historical crank, decorative crank, crank, shooting crank, hunting crank, salvaging crank. Action alone worth twice our give-away prices! Rust and all! Total price only $5.58. Shipped pre-oiled. **Original Remington .43 Bayonets only $1.00 each! Ye Old Hunter just made a cash purchase from the bankrupt stocks of the famous "Octopus Arms Associates"— (You all remember their slogan—"Our Tentacles Are Everywhere") —before they collapsed due to over-extension and under-pricing and his loss is your gain. Buy now while the supply of this famous "Long Green Tooth" angular bayonet lasts. Supply exhaustible! Now!**

OLD HUNTER PUBLICATIONS: send 25¢ for story of America's most famed and most biggest Arms Merchant. Send 50¢ for 1st edition colored printing of America's amazing new automatic rifle—the Armalite AR-10—a world first from Ye Old Hunter's secret underground printing press. Order today and save. Save!

INCREDIBLE AMMO BARGAINS

MINIMUM ORDER 100 ROUNDS. All prices below per 100 rounds. All ammo must be shipped RREXPRESS COLLECT. MINIMUM ORDER 100 ROUNDS. Sensational New sensational prices! Order now and save!

6.5MM JAPANESE ISSUE. $6.45

At last! The first and only offering of this supremely desirable Japanese rifle and carbine cartridge brought back from the mysterious Truk naval base as part of a huge initial oriental purchase by Ye Old Hunter, a black belt holder in ammo bargains. 138 gr. FP bullets; All brass cases!!! Delivery in February. Order now!

6.5MM SWEDISH MAUSER $5.45

Here it comes! The finest 6.5mm rifle cartridge ever developed and produced by the ever-lovin' Swedes to standards unsurpassed anywhere on the earth. A real Swedish by any standards at a GIVEAWAY price. Match price, 168 grain bullet, superb brass cases assure reloading with proper components for years to come!

6.5MM ITALIAN IN CLIPS $5.45

Superb condition original 6.5mm Italian ball loads for all those imported rifles. Packed in original 5 rd. clips ready to use in all those Italian 6.5 mm rifles and carbines. Cheapest price ever offered for these magnificent cartridges. Available elsewhere at up to $12.00 per C.

7MM MAUSER (WIN. CTG. CO.) . $3.45

Gorgeous original Winchester 7mm commercial export ammo in 20 rd. boxes each round guaranteed with cracked neck to enable tool-less bullet pullin and effortless salvage. Order this "Pullin Ammo" sensation today —salvage and verdigris lunatics attention! Save!

7.35MM ITALIAN IN CLIPS. $5.95

Finest quality recent date issue ball ammo in ORIGINAL 6 rd. CLIPS at the lowest price ever offered. Others sell the clips alone for more than we sell the ammo loaded in them. 128-gr. original issue ball round . . . the first of the new 'short cartridges' and still among the finest. Year's greatest bargain!

.30-06 U.S. COMMERCIAL $5.95

Sensational low price on these superbly intact delightfully mellowed Winchester 150 GR FP Bullets. Perfectly flawlessly preserved brass cases. 20 rd. Commercial original boxes. Manufactured in roaring 20's and joyous 30's to delight the expensive 50's with their unbelievable economy and discolored hues!

U.S. .30 (.30-40) CALIBER KRAG, $7.45

Leave it to Ye Old Hunter to return triumphant with this greatest large rifle cartridge bargain in America today. Beautiful original Commercial U. S. Krag 220 gr. FP loads at far less than even reloading components costs. Supply not inexhaustable, so better order now to be sure! Manufactured by Winchester. Etc.

.303 BRITISH ISSUE LOADS $4.45

Choicest imported 160 Gr. Ball Ammo available at a giveaway price less than the cost of reloading your own. Don't wait to stock up on this tremendous Old Hunter Special! Never again at this price! Salvageable!

8MM GERMAN MAUSER ISSUE. . $4.95

Beautiful original German issue—in original 15-rd. boxes from Germany's greatest factories—RWS, DWM, others. True 0.323 diameter bullets alone worth more than our give-away price for these entire rds. The Pride of the Nazi Wehrmacht! Why pay more elsewhere??

8MM FRENCH LEBEL RIFLE. $5.45

Rarest of the rare are these true 8mm Lebel rounds. Solid bronze 198 gr. boat tailed bullet assures fantastic long range accuracy in these 8mm French rifles and carbines chambered for this cartridge. Order now for your life's requirements as at this price this ammo giveaway just CANNOT last. Famous French First!

9MM F.N. STEYR PISTOL. $4.95

This amazing find makes possible this most shattering offer of the century. Fabrique National's superb smokeless powder ammo packed in original long boxes. Now!

.38 COLT AUTOMATIC $5.95

A rare and amazing opportunity! Who would have thought this magnificent find would be ever available again—and at a lower price than when originally made? Stock up now while tiny stock lasts. Commercial Winchester stayniless 158 Gr. in original 50 Rd. boxes.

.42 COLT BERDAN RIFLE. $9.95

Amazing but true! Ammo buyer and shooters' dream! Original .42 Colt Berdan cartridges in untouched 6 rd. packets from Tula arsenal. Paper patched 370 gr. bullets in like new condition at this unbelievable bargain. AGED BUT CLEAN!

11MM MAUSER RIFLE ("Big 11") $9.95

Don't be trapped into paying a fortune elsewhere for this magnificent German Mauser issue load. Standard 386 grain lead bullet makes ideal sporting load for those original Model 71/84 Mauser rifles you've been stealing of late. Ammo almost bears Bismarck's finger-prints, it's so old, but we have never had a misfire to date so order today while the getting's good! Now!

.43 (11MM) REMINGTON $5.95

Who else but Ye Old Hunter would have found this treasure? Original Remington UMC loads in original boxes—375 gr. lead bullet makes superb target or hunting round for those shootable .43 Remington rolling blocks. Appears magnificent—shootability unguaranteed. Worth twice this price for components alone!

.44-40 WINCHESTER BY U.M.C. . $4.95

Rare original UMC 217 Gr. Black Powder loads that will function in all modern guns as well as those choice old Colts and Winchesters. Huge new shipment permits this unprecedented low bargain price. Save now!

.45 ACP *(U.S. COMMERCIAL)* . . $4.95

Unbelievable discovery of enormous underground supply permits this astonishing bargain. U.S. Commercial production with NON-CORROSIVE primers at world's lowest price. 230 Gr. Save 80% under market! All brass cases but primer condition assures erratic and uncertain functioning in some cases. Reload and save, save save!

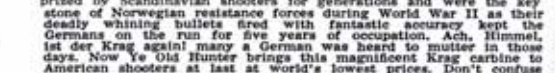
.45-70 GOVERNMENT ISSUE . . . $5.95

Ye Old Hunter now re-offers the famous sell-out of last winter—finest super caliber round ever made in United States. these are in astonishing original condition with 405 gr. full lead bullet. Order immediately while limited supply lasts. Last chance on intact original model .45-70 rounds. Black powder. Ammunition. Appears ready for the reloader (save, save, save) as most primers indent with perfect symmetry and complete silence! And, at this price you're ahead anyway!

REGISTERED DEALERS: Write on your official letterhead for new sensational discount lists.

ORIGINAL WINCHESTER MODEL 73's

$29.40 UP **Caliber 44-40**



ONLY 60¢ PER INCH

Here they are! The world's most famous and most desired rifles! Yes, Ye Old Hunter, the king, the absolute end, the supreme ruler of the gun trade has again scooped the world to bring the lucky shooters of America this incredible opportunity—Original model 73 Winchester rifles—for only 60¢ an inch—(Ye Old Hunter is all heart and he cannot stand high prices—in original .44-40 caliber. Ammo available everywhere, (including Sitting Bulls' .44-40 rejects directly from Ye Old Hunter). Condition of all rifles is completely complete and they'll clean up excellently to reach NRA fair to good condition —(just use a little of that ol elbow grease and midnight oil). Traces of original rifling unearthable in bores and a small goat could fly through the bores without brushing its tiny wings. Hurry, hurry, hurry, as this opportunity is the greatest since the Teutonic Knights stole the battlefield offal from Lutzen in 1521. Total prices, all available models: Immediate delivery. No packing charges. NOW!

GRADE III—as described above—60¢ an inch, or, total: **$29.40**

GRADE II—better than grade III—70¢ an inch, or, total: **$34.30**

Bayonets: A few extremely rare original Winchester 73 long angular bayonets at only $2.95 each. Don't stare wildly. Buy! Buy! Buy!

RARE ORIGINAL REMINGTON CARBINES

7mm Remington Carbine

ONLY $11.95

ONLY $10.95

.43 Remington Carbine

1. Ze extremely rare and ultra-desirable original 7mm Remington carbine is one of the most fought-over Remington models among collectors today—yet now, Ze Old Hunter, his generous heart bursting with generosity, brings this scarce gem to Ze American collecting fraternity for all time at the unbelievably low price of only $11.95!! Order today while supply lasts.

2. Ze original Remington, .43 Carbine was the first of this magnificent carbine series and is a prized dealer specimen everywhere in the U. S. Has been selling at outrageous prices elsewhere but Ze Old Hunter now brings it to you, ready to go, at only $10.95! How can you go wrong with this giveaway?? Sold everywhere else at over $20.00.

GARRIBALDI'S GREATEST! FAMED MODEL 70-VV SNIPER RIFLES

Length 53⅛". Weight 9½ lbs. Cal.: 6.5mm

Only $9.95 complete with 100 rds. of original ammo!

Yes, you are not dreaming!!! This offer is TRUE!!! In this world of sky-rocketing prices and gun gouges from elsewhere YE OLD HUNTER has threaded his way back from Italy with GARRIBALDI'S GREATEST at a price which will set a record forever! The incredibly accurate and amazingly machined 6 shot repeater GARRIBALDI'S GREATEST can be bought NOW for ONLY $9.95 COMPLETE WITH 100 ROUNDS OF AMMO IN ORIGINAL CLIPS. This UNPRECENDENTED bargain will resound in the arms halls of Valhalla forever and with good cause: others sell just the ammo at this price: still others have asked as high as $40 for these rare and desirable precision rifles whose design still influences firearms progress. Rumor has it that the great Garribaldi insisted on this model for his elite troops after a sniper clipped the cock feathers off his cocked hat 600 yards while aiming at his head. This is the rifle that COULD HAVE WON the Korean War if the Chinese had been unarmed. Enjoy the greatest and cheapest big bore shooting of your life with your bloop condition throughout GARRIBALDI'S GREATEST at only $9.95 COMPLETE WITH 100 RDS. OF ORIGINAL 6.5mm AMMO IN ORIGINAL 6 RD. CLIPS—if you miss the first shot you have 99 more at Ye Old Hunter's expense—(Ye Old Hunter is all heart.) Unlimited supply of extra ammo. EXTRA AMMO, Garribaldi's Greasy Growlers at only $5.00 per 100.

U. S. KRAGS! U. S. KRAG! ONLY $16.95 UP!!

CAL. .30-40!

1. Original U.S. Krag Short Rifle (Type "S")

2. Original U.S. Krag Long Rifle (Long Tom)

Greatest U. S. .30-40 Krag collection ever assembled and NOW at close out prices within the reach of ALL. While they last, these worn but serviceable jewels are being literally given away by Ye Old Hunter at special bargain prices and, in addition, all rifles are fortunately WITHOUT HANDGUARDS so you can admire the full length of that handsome full-tapered, no-step barrel! Ready for instant handguard installation "as is" or for conversion to a magnificent U. S. sporter as you while away the hours around the ole cracker barrel this winter. All rifles are otherwise completely complete and, in spite of long years of relentless service, clean-up-able for happy inaccurate shooting for years to come. **Never again will such Krags be available at such prices so order today while tiny limited remaining inventory still remains. Now!**

1. A rare and ultimately desirable U.S. Rifle—Seldom found in even the finest collections—These Krag short rifles were especially commercially prepared in the 1920's and 30's in the U.S., as an exclusive export model and, hence, are very rare today. No U.S. collection complete without one and they can be bought from Ye Old Hunter for only $17.95. Condition: worn but complete and serviceable and ultimately desirable! 2. The world famous Krag "Long Tom" in firing condition, only $16.95. Order now! Now! All rifles completely ready for a thorough cleaning thoroughly! Krag ammo: Only $7.45 per C for superb U.S. Win. Clip Co. original, Mil. Export loads in 20 rd. commercial boxes 220 gr. FP bullet.

U. S. MARTIAL COLLECTORS! Treat yourself to a complete "Rarest Krag" collection, as above, for only $34.89. **TWO** Krags for less than the value of one! All base-condition specimens, (not in fars).

AMERICA'S BIGGEST ARMS HOUSE! America's lowest prices! No connection with no other hunter nowhere—never! Alexandria, Va., Gun Capital of America.

CANADIAN BUYERS! Now Ye Old Canadian Hunter has established the Dominion's greatest arms center at P. O. Box 628, Peterboro, Ontario. Add 20% to above prices.

ALWAYS PLENTY OF T. S. (TREMENDOUS SURPRISES) ON HAND

SALES TERMS: All guns and ammo shipped F.O.B. Alex., Va. Send check or M.O. DO NOT SEND CASH. Sorry no COD'S. "Money's worth or money back" guarantee when goods are returned prepaid within 2 days after receipt. Ye Old Hunter will not answer asciminoneous letters! Please send them elsewhere! All orders must be shipped RRXPRESS COLLECT. Ship from the east and save, save save, save, save, save.

HUNTERS LODGE • 200 S. Union St. • Alexandria 2, Va.

New!

5 "DOUBLE" BARREL COMBINATIONS OR 7 DIFFERENT "SINGLE" PATTERNS—

Patent Applied for

— from cylinder to full choke
any patterns you need — either as a "single" or automatic "double" with

the AdjustoMATIC®
SHOTGUN CHOKE

Now available in 12 gauge only
See your dealer or order direct

only

$29.95

INSTALLED - READY TO USE

16 and 20 gauge sizes will be available in the Spring of 1958

DEALERS—
See it at the U.S.G.A. Show, Chicago, February 1-5 at the Hotel Morrison, Room 1073.

The new Adjustomatic choke installed on any single barrel pump- or autoloading shotgun gives you a choice of choke settings for "single" patterns, and a selection of "double" combinations for any and every type of shotgun shooting. Now you can set the pattern you want for your first shot, and you'll get the pattern you *need* on the second shot automatically. For the bird you've missed, or the "double" you've hoped for, you'll always have the proper pattern for both shots. And you'll have five different "double" combinations for any type of game from woodcock to geese.

5 "doubles" and 7 "singles" in one gun

Five combinations of "double" patterns are available in automatic choke — cylinder to improved, improved to modified and modified to full choke, with two intermediate settings between these three. For the gunner who wishes to shoot one pattern continuously, seven separate manual settings are provided — from cylinder to full choke. The Adjustomatic's complete range of settings and its unusual flexibility of operation provide positive control in producing the proper patterns with various loads.

HOW IT WORKS

A wedge-shaped split ring, contained in the adjustable sleeve, constricts the choke by manual setting. On firing, the ring and outer sleeve of the choke move forward and lock, automatically reducing the bore of the choke. Finger-tip control, by a simple re-setting device, restores the choke to its normal position.

Before you buy a gun or choke

Ask your dealer about the Adjustomatic. It's made of tough, high-tensile aluminum alloy for strength and light weight, and special alloy tool steels where resistance to shock and pressure are required. Its light weight improves balance. It helps your swing and reduces recoil. If your dealer can't give you full information send the coupon below.

For the gunner who wants to shoot better — it better be an ADJUSTOMATIC!

A PRODUCT OF THE HARTFORD GUN CHOKE CO., INC. HARTFORD, CONNECTICUT

The HARTFORD GUN CHOKE CO., INC.
131 Russell Road, Hartford 1, Connecticut

Gentlemen:
Please rush FREE folder and shipping carton for my gun barrel.

NAME_____
PLEASE PRINT
STREET_____
CITY_____ STATE_____

By JORMA TAITTO
Finland Olympic Champ

I USE A CUSTOM RIFLE built for me by Manterri, who designed the Manterri trigger on the "Lion" commercial smallbore free rifle. My own gun is built around a 6.5 mm Jap Arisaka bolt, which allows the gunsmith the chance to do some careful regulation of firing pin fall for crispness and fast action. The custom receiver is flat sided, very heavy, for stiffness and consequently accuracy. The barrel, made by the large factory of Sako in Riihimaki, is in 7.62 caliber, the same as the old Russian rimmed service cartridge. I use a 185 grain step boattail bullet for 300 meter shooting, and with this gun fired fourth in the Olympic matches.

MY FAVORITE GUN

By CORNEL WILDE
Star, "The Devil's Hairpin"

MY FAVORITE gun is my Weatherby .300 magnum, which I used this past year for hunting elk. I fired it only once after sighting in —the shot that killed the elk. I was very impressed with its killing power and the flat trajectory. I hit my elk in the neck as he was running away, and the best part of him is in the freezer. This is the first rifle I ever had made to order to fit me, and it is one luxury I think every hunter should try to allow himself.

TRIGGER TALK

THE GRAND MASTER of fast and fancy pistol shooting is now the past master. Dead is Ed McGivern, at his home in Great Falls, Montana, at the age of 83. Born in 1874, McGivern grew up in a west that was struggling not to be "wild." His father, when asked to buy the lad a gun, derided young Ed's wish with "Ye want to be a thug; ye'll be in the penitentiary." But the boy worked hard and saved enough money for a gun, apparently a cheap .22 rifle. Practice and more practice was McGivern's secret formula for his phenomenal skill. "When I first set up a target against a roll of barbed wire," he recalled, "I was lucky to hit the wire in two shots out of a box." But his skill improved with the years until he was without peer in the field of handgun wizardry.

His letters to the last were full of dry humor . . . "I have never been a debunker, I have just sought the facts," was the gist of his approach to speed gun handling. Instruments developed by McGivern helped settle many claims about speed in gun handling, and his students today continue the studies he began. Gathered about him in his home town in the last days of his life were many friends, members of the Ed McGivern Gun Club. But his passing will be noted with regret and sorrow by friends all over the world, friends he never even knew, shooters who found inspiration and knowledge from his writings. Taking up his main fast gun research late in life; publishing his book "Fast & Fancy Revolver Shooting" when he was 61; he remained a vital and amazing character in the winter of life till his death.

Coincidentally, in this issue, GUNS had long ago scheduled the appearance of *You, Too, Can Be A "Trick" Shooter*. By Clyde Howell, who was greatly influenced by Ed McGivern's book, this article, showing that the life-long study of Ed McGivern will be continued, is more fitting than any tribute we could make in his name.

For scattergunners we present an unusual personal account of "Gunning Europe's Live-Bird Races." Flyer shooting is an accepted and justly popular sport in most parts of the world, and Chicago's distinguished "top guns," world champion woman shot Carola Mandel, and Colonel Leon Mandel, present some of their experiences in the Colonel's unusual article.

This seems to be a "foreign" issue: Col. Mandel's story, plus one by our globe-trotting Elmer Keith, now busting bull elephants on Africa, plus another by Bob Parkyn, who toured the arsenals of Europe (*west* Europe only!) on the Gun Tour, plus Alex Kerr's profile of August Heym, gunmaker extraordinary, "The Gunsmith Too Tough To Die" . . . these plus a couple more including Bill Edwards long look at the Civil War make this issue of GUNS one of the fullest we have presented in some time.

Scheduled for the next issue are a couple you'll not want to miss, including more fuel to the "Fastest Gun" fire. This one is illustrated with the most remarkable picture ever taken of a genuine and fast "quick draw." See it and more in next month's GUNS.

THE COVER

The world knows Eli Whitney as the inventor of the cotton gin, but it was Whitney the gunmaker who gave America an even greater gift — the concept of interchangeable parts which is the essential keystone of all our modern mass-production methods.

Guns

FINEST IN THE FIREARMS FIELD

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IN THIS ISSUE

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GUNS in the NEWS

[Special]—

◆ Sometimes things *are* black or white. Within a period of a few minutes, Joseph Lunny Jr., Inverness, Calif., hunter, bagged a pure white deer and a black one.

★ ★ ★

◆ Alfred W. Saunders of Holt, Mich., shot a rabbit and a pheasant with a single shot.

★ ★ ★

◆ Harold Pope of Oklahoma City bagged a quail while hunting without firing a shot. Flushed by a dog, the quail flew low on the takeoff, collided smackdab with Mr. Pope . . . and broke its neck.

★ ★ ★

◆ Upon returning home from his high school teaching job, James Petcher of Utica, Mich., found an officer with a drawn revolver waiting for him. Someone had seen a pistol sticking out of Mr. Petcher's pocket and reported the matter to police. It turned out to be a water gun he had taken from a student.

★ ★ ★

◆ From now on there's a certain Detroit cabbie who is apt to leave well enough alone. When a passenger pointed a gun at him and demanded cash, the driver chuckled, "I know a toy pistol when I see one. You'll have to show something better to scare me." The passenger then proceeded to pull out a butcher knife and the cabbie handed over his money.

★ ★ ★

◆ From the Lena, Ill., Star: "Hear about the careless hunter who climbed through the fence with his gun cocked? He is survived by his wife, three children—and a pheasant."

Get that B&L SCOPE... You want NOW!

You've heard a lot about Bausch & Lomb rifle sights . . . probably, you've wanted one for a long time. You like the way they're built—so rugged they won't knock out of zero—and that they won't fog up in any kind of weather. Now, there's the new BALvar 8 . . . variable power from 2½× to 8× with *no change in reticle size, eyepoint or focus!* A sight to meet all your hunting requirements. And the new *wide field* BALfor and BALsix hunting sights. Yes, Bausch & Lomb has a lot to offer—stop in at your Bausch & Lomb dealer and see these terrific sights. See for yourself how you can turn the BALvar 8 from 2½× to 8× without changing focus or reticle size. Be sure to look at the BALvar 24—variable power target-varmint sight with powers from 6× to 24×. You'll find the right scope for your needs and you'll find the B&L Time Payment Plan, too—lets you buy your scope *now,* for as little as 10% down—and pay off the balance in convenient monthly payments while you're enjoying the performance of your new scope.

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BALvar 24 Variable power, 6×-24×, target and varmint sight. Tapered cross-hair reticle ⅛ minute *at center*; external adjustments; fogproof. With mount $160.00. $16 Down.

BALvar 8 Variable power, 2½×-8×, hunting and varmint sight. Tapered cross-hair reticle ⅓ minute *at center*; external adjustments; fogproof. $99.50. $10 Down.

BALvar 4 Variable power, 2½×-4×, hunting sight; external adjustments; fogproof; cross-hair or tapered post reticle. $80.00. $8 Down. Lee Dot extra.

BALsix 6× big game hunting sight. Largest measured field of view of any 6× sight, 21′ at 100 yds.; cross-hair reticle; 30mm objective; external adjustments; fogproof. $75.00. $8 Down.

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BAUSCH & LOMB

SINCE 1853

WHAT'S HAPPENING ON THE LEGAL FRONT

Legislative Convention Called By Treasury ATTD

ON THURSDAY, December 5, 1957, a conference was called of persons selected to be representative of the gun interests of America, to discuss with the Alcohol & Tobacco Tax Division of the Treasury a revised set of revised regulations. The original revised regulations contained several requirements which proved to be generally unpopular with a large number of dealers, sportsman's conservation groups, association and industry leaders, and Congressmen speaking for their constituents.

The first hearings on the revised regulations were held in Washington August 27-28. For some months thereafter no comment was forthcoming from the Treasury as to the outcome of the hearings. The initial session became an almost 100 per cent blanket indictment of the Firearms Branch of the ATTD. It is supposed that this had something to do with the fact that the December 5 conference was held by telegraphic invitation, and no public notice given.

According to one important witness present at this conference, the intent of the ATTD seemed to be to present further revisions of the already-nine-times-revised regulations, and thus induce an assent by a small group of gun people. In the words of that observer, "I think we showed them again that their regulations were no good." Yet coming to GUNS shortly after the termination of that conference was a telegram from the Director of the Department stating: "Revised Regulations Still Being Considered."

Significant fact emerging from these conferences is the confusion among pro-gun people as to just what the Treasury's intentions are in this whole matter. A leading Treasury ATTD enforcement officer in the field, in whom we have confidence, states his own views of the Firearms laws as "I'm here simply to enforce the law. I have no personal views; I'm only here to carry out the wishes of Congress. After all, I didn't enact the damn thing." Another spokesman for a leading trade association expresses the understandable view that "We are willing to accept any reasonable regulations," recognizing that public good may require some degree of regulation for the gun trade. Other, more rabid and regrettably misinformed pro-gun men, both publicly and in print, wax nearly hysterical about the Treasury's "evil minded attitude" and sob about "They (Treasury) want to make it so your boy and mine can never go hunting with his shotgun, etc., etc." Actually, the present Treasury regulations are not unduly restrictive of shotgun and ammunition sales, but would hit hard at pistol and revolver sales. If crime prevention and aiding police officers is the Treasury's intention with stricter regulations, then they take an odd way to go about it, since the majority of "firearms" seized by police include rifles, shotguns, and children's BB guns.

Existing proposed regulations as revised since August, 1957, now include provision for keeping records on pistols and revolvers "for a period of not less than fifteen years from the date the transaction occurs . . ." This is an odd change for the ATTD, blowing hot or cold according to their pleasure. For in support of the former regulation as proposed, that records be kept perpetually for the life of the company, the Treasury Secretary's aide, R. E. Train, wrote to Senator Homer Capehart of Indiana that this is "clearly required by the word of the statute," that records are to be kept perpetually.

Now, if the records are "clearly required" to be kept for all time according to the wording of the Act of Congress which the Treasury ATTD is charged to administer, by what authority does the Treasury later declare that the wording of the Act no longer means "perpetually" but now means 15 years? Why not ten years? Why not just leave the record requirements as they were before? The statutory limits already in existence are adequate, claim most pro-gun people. Pretensions by the Treasury Firearms Branch to any other interpretation or creation of new regulations are discriminatory, dealers claim.

The realities are that firearms records give much comfort to the book-keeping personalities in government and law enforcement work, but are functionally of little use in most cases involving criminal uses of firearms. Guns employed by professional crooks are not registered to them. Factory records, although in some cases quite complete, show only the jobber to whom shipped, nothing more. Elements which make a conviction in any case, including those involving firearms, are far more concrete than the shadowy record of gun shipments which lead to a blind wall. The concept of firearms records for crime detection, while theoretically neat, in practice lacks merit.

Another proof of the Firearms Branch's lack of adequate technical information occurred in the Dec. 5th revision. A "revised revision" stated the name and model and serial stampings would not be required "on antique or obsolete firearms incapable of firing commercially available fixed ammunition." The function of this exemption is not clear, except by using the catch words of "antique" or "obsolete" (without definitions) the clause might soothe the more fervid pro-gun guys. The concept of "incapable of firing commercially available fixed ammunition" was pointed out to them as being pointless, since there is no firearm made, regardless of vintage or type of ignition system, for which ammunition is not now "commercially available."

For example, the Colt Revolver, Model 1909,

U.S. Army, caliber .45, does not function well with currently available .45 Colt revolver ammunition. Modern ammo has too-thin a rim to work with surety in firing and extracting from the M1909 revolver. Ammunition for this gun, now obsolete by military and commercial standards, is the Frankford Arsenal-made M1909 revolver cartridge with a special big rim. This revolver by definition would be excluded from the provisions for name stamping and numbering, and by inference from the record keeping requirements. Other examples can be found of firearms perfectly suitable for criminal purposes that do not use "commercially available" ammunition, but do use government calibers which are NOT "commercially available." And distinction should be made to avoid confusion on the interpretation of "commercially available." For modern, current list ammo from U.S. factories is considered different from ammo imported in limited lots, no matter how large, if the ammunition is "war surplus." For example, the .45 target automatic ammunition put up by our big companies is "commercially available." But is Frankford Arsenal or other U.S. or Foreign contract .45 automatic pistol ammunition "commercially available?" There is a lot of it in circulation, but it is certainly not "commercial" ammunition.

Further modifications of the August-disputed regulations were made in the attempt of Dec. 5. As the telegram cited indicates, the revised revised regulations are still not in effect. Significantly lacking in all attempts from government to regulate guns and ammunition are regulations immediately affecting small bore sporting rifles, hunting rifles, and shotguns. Yet the percentage of these weapons figuring in any police department's annual statistics of crimes involving firearms, including murder, holdups, and robbery, are very high. When many crimes involve shotguns and sporting rifles, regulations aimed at "firearms" to curb crime should logically be aimed at all guns, from the consistent police point of view. Again, regulations affecting solely pistols and revolvers, and ammunition for them, discriminate and are non-functional.

Major powers in the arms field include the Sporting Arms And Ammunition Manufacturer's Institute. While the work of their legislative officers is good, and their educational program worthwhile, many pro-gun people get the impression that SAAMI is not pushing the anti-gun crowd as hard as it could. This, if true, may reflect the greater importance of shotguns and sporting rifles to Winchester and Remington, the two big firms in SAAMI. As long as shotguns and sporting rifles are not threatened, SAAMI may not feel it needs to take steps to combat the anti-gun legislation movement. This failure to consider the problems in the pistol business was one of the reasons which gave rise recently to a move among handgun makers to form their own trade association, with emphasis on combatting bad gun laws and educating the public to an appreciation of the enjoyable lawful uses of handguns.

After all, a pistol can be used more easily on an indoor range than a rifle, and the storage and ammunition costs are generally less. But the pistol makers have yet to show the collective spirit so necessary in this legislative business. Meanwhile, such

(*Continued on page* 59)

CROSSFIRE

LETTERS TO THE EDITOR

"Setting the Record Straight"

Reference the column "Trigger Talk," which appeared in the November issue of GUNS Magazine, I wish to take exception to certain statements and quotes which appear therein regarding the Director of Civilian Marksmanship's stand relative to the National Firearms Act.

This article reads "A resolution condemning *them** was passed, and the Army Secretary Milton communicated to Treasury Secretary Anderson, the Defense Department's strong opposition to the regulations and their effect . . ."

The Board at its meeting in August went on record as opposing the *implementation* of regulations promulgated by the Alcohol and Tobacco Tax Unit of the Treasury. *The Board took no exception to the basic law.* This point must be made extremely clear—the NBPRP has *never* taken a positive stand against the National Firearms Act or the Federal Firearms Act, and it is unlikely that it will ever do so. It is true that Mr. Milton (erroneously referred to in subject article as Secretary of the Army and a cabinet member) Assistant Secretary of the Army (MP&RF), did have a conversation with Treasury Secretary Anderson, indicating the Board's exception to the proposed *implementation* of it as a regulation and its effect. This must not be interpreted as constituting an exception to the basic law.

The National Firearms Act and the Federal Firearms Act are matters which require the obedience of the National Board for the Promotion of Rifle Practice and every United States citizen. As an agency of the government, the Army cannot take a stand against such laws. If this implementation is ordered into effect, the Board will have no recourse but to comply with this law.

The interpretation of the "quoted" remarks of Lt. Colonel Ellis Lea, Assistant Executive Officer (referred to in article as Assistant Director of Civilian Marksmanship) as representing Army policy on this subject is erroneous and unauthorized. The National Board is an Army Agency under the direction of the Assistant Secretary of the Army, and such statements regarding Army policy must come from that office or the Chief of Staff, United States Army.

Hugh W. Stevenson, Colonel, GS
Executive Officer
National Board for the Promotion
of Rifle Practice

The word "them" referred to the Treasury revised regulations affecting the Federal Firearms Act of 1938. GUNS *apologizes for incorrectly titling Mr. Milton and Lt. Col. Lea. No inference was made nor intended that Army policy is contrary to the laws of the United States. We reported the comments of Col. Lea because in trying to report on the Treasury hearings we would be telling only half the truth were we to omit pertinent comments of individuals with whom we spoke. The views of the Army, officially and unofficially, certainly must be considered if one desires to find the facts which exist in the relationship between the National and Federal Firearms Act, the Treasury's enforcement of these Acts, the Army and Director of Civilian Marksmanship which these Acts overtly affect, and the requirements of National Defense.—Editors.*

What Our Readers Like

Could you put me in touch with readers who would care to exchange information on guns and shooting? I have a small shooting library; my very large one was destroyed by enemy action in 1941. I have done a good deal of rifle shooting, including big game in India, but have no longer any desire to kill and confine myself to target shooting. I have shot at Bisley a great deal. My interests are in all small arms except shotguns, but including air guns and automatic weapons. I have been both machine gun officer and weapons training officer; am now a civilian.

L. Clarke
37 Warwick St., Rotherham
Yorke, England

Your magazine really rings the bell. I enjoy all parts of it, including the ads. Articles like the Col. Lewis item on the .30-06 cartridge make especially strong appeal. I wonder how your readers, generally, react to historical material? I know that this class of material should not be "over done," but I put in my personal plea for a little of it—in every issue.

May you have complete success. GUNS is needed.

Carl P. Russell
Orinda, California

May I commend you on your publication, GUNS. It is a splended medium for keeping up to date on the latest developments, with just enough of antique lore to lend enchantment to an otherwise rugged subject. I appreciate your diversification of article material very much.

James Stewart
Iroquois Falls, Ontario.

After having read Mr. Smith's letter regarding the dangers of using .45 ACP Cartridges in Webley Revolvers printed in your October issue I would just like to mention that the standard British Service Revolver cartridge used in both World Wars I and II was loaded with cupro metal jacketed bullets.

The Webley Mark VI was in fact designed for use with jacketed bullets and is an extremely rugged weapon which should handle the .45 ACP cartridge quite satisfactorily *provided* the weapon has been converted correctly.

J. B. LeBreton
Birmingham, England

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We have obtained a LIMITED supply of Genuine Select Grade 9mm Model S/42 Mauser Lugers. Each of these weapons has fine arsenal blue finish, checkered walnut grips and is in Excellent Mechanical and Shooting Condition. All guns are complete & original.

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ACCESSORIES—HOLSTERS—European World War II with Flap & Cartridge Pouch—**Near New Condition** $5.50
AMMUNITION—Swedish High Powered Automatic & Sub-Machine Gun 9mm Ammo. $9.75 100 rds.
EXTRA CLIPS—Brand New $7.50
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The Very Latest in Single-Action Revolvers. Custom Blue Finish, Walnut Grips, Full-length Rib, Solid Front Sight, Rear Sight Adjustable for Wind and Elevation.

.22 Caliber 4" BBL. $109.50
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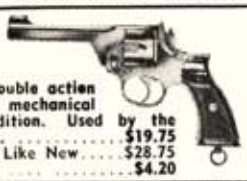
ENFIELD COMMANDO .38 CALIBER



Six shot 5" Bbl. Double action revolver. Excellent mechanical and shooting condition. Used by the British Commandos. $19.75
Nickel Plated Gun Like New $28.75
Ammo Box 50 Rds. $4.20

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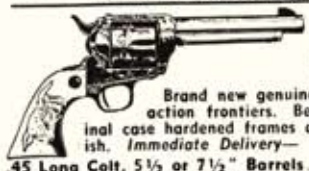

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Firing Pin	1.00	Base Pin Spring	.33
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Hand	3.33	Gate Catch	.33
Trigger	2.33	Gate Spring	.33
Main Spring	1.67	Ejector Tube	6.67
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45 cal, 44 special		Cylinders 45, 38 Spl.	
38 special		and 44 Spl	13.33
-5½"	11.33	All Screws	$0.33
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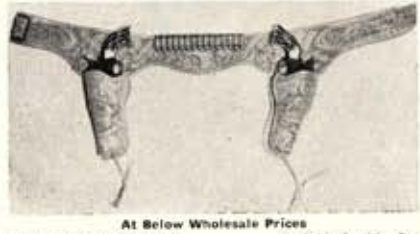

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Original Blue Finish & Grips, V6 Bores. Excellent mechanical and shooting condition. Ammo $3.75, 50 rounds $31.50. Military Holster $5.50.

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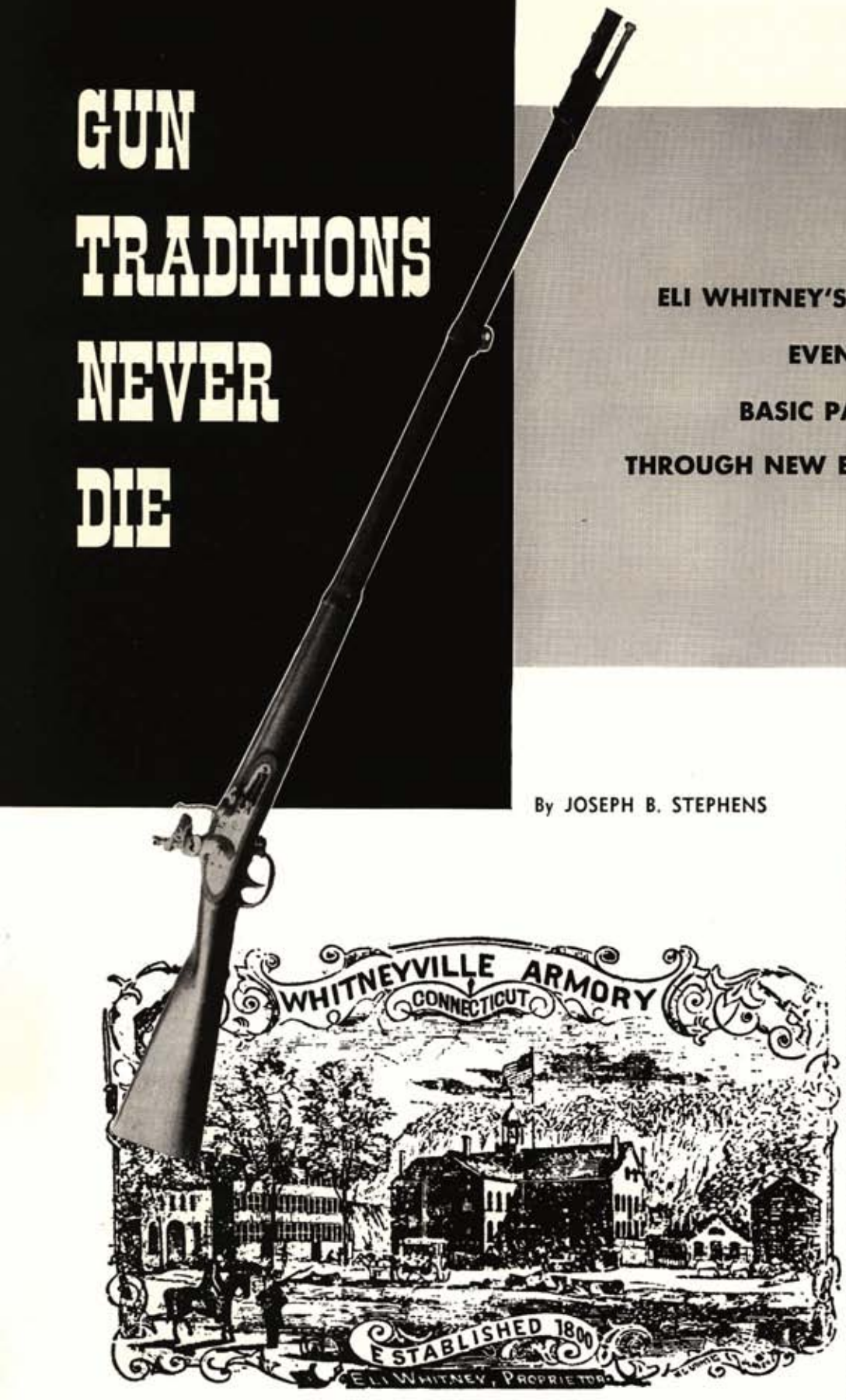
GUN TRADITIONS NEVER DIE

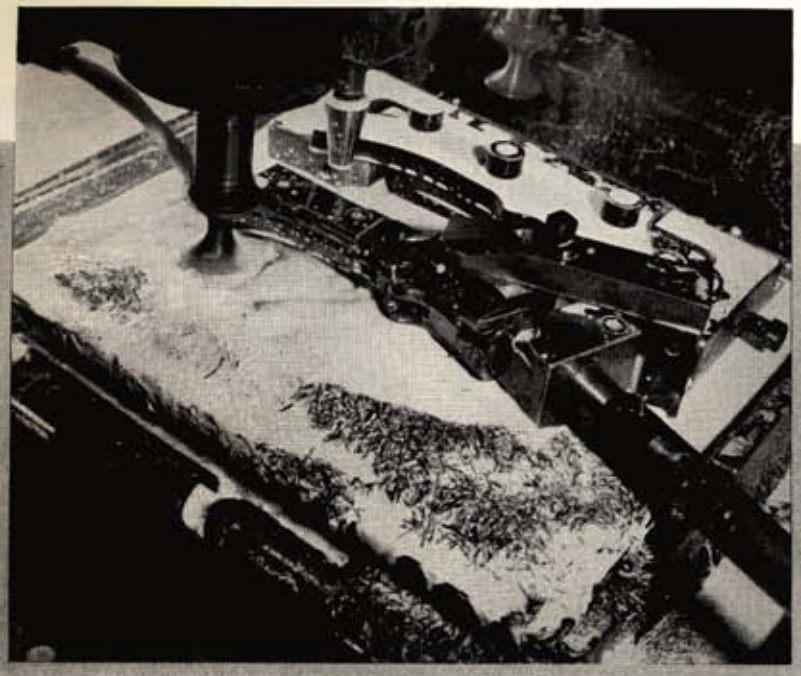
ELI WHITNEY'S IDEAS, HIS PHILOSOPHIES, EVEN HIS MACHINES, ARE STILL BASIC PATTERNS IN ARMS-MAKING THROUGH NEW ENGLAND AND THE WORLD

By JOSEPH B. STEPHENS



THE NEAT BRICK BUILDING carrying the mark "Whitney Firearms Company" seems at first glance to be far removed from the ancient, many-storied works that was the old Eli Whitney factory. Inside, arranged on a clean, solid concrete floor, are crisp new machines and the quiet whirr of electric motors—all vastly different, you think, from the old days when flickering gas jets gave light to workmen on 14-hour daily shifts. From each machine, then, black belts of oxhide rose slapping to the ceiling from the machines, to take power from a swiftly turning drum driven by the big overshot water wheel in the mill race outside.

Different? Yes, but not as different as you think. Here, and in all the gun factories in Connecticut, is much that is similar, too. Take off the belts; gear in electric motors; spray the machine frames, the lathe beds, with glossy gray enamel; and, over all, now that the overhead shafting is out, put a gleaming array of fluorescent lights. Those are the basic differences. For in external details only does today's arms industry differ much from that begun



Basic tool for making muskets to modern pistols is double-spindle profiler, shown above cutting Marlin rifle frame. Current machine is identical with ones sold by Pratt & Whitney during last century.

by Eli Whitney so many years ago.

Machine manufacture of firearms with interchangeable parts began little more than a century and a half ago in Hamden, Connecticut, in 1798, when Eli Whitney contracted to make 10,000 Model 1795 flintlock muskets for the government. Whitney cared nothing about firearms and he approached the problem as an inventor. Gunsmiths of the day believed that Whitney was attempting the impossible. They knew that only skilled hands and sharp tools could build a gun, and anyone who thought anything different was crazy or didn't know much about guns. Coins might be struck by machinery, and each one might be exactly the same; a coin was just a cold, dead piece of metal, an object to be exchanged for something worth having. It was fitting that a dumb machine should strike coins.

But a gun was something else. It needed the firmness and skill of a man's hands to bring it to life. It needed attention to its own little peculiarities. It needed a sacrifice of time and patience and skill. In a way, it was like a birthing. It took time and labor to make a gun, and when it was finished it was nearly alive. A machine could never be made that would build a gun. . . . But Whitney did it.

Today, almost within the shadow of the old overshot waterwheel that turned the machines in Whitney's original mill, seven modern gun plants use Whitney's methods to make rifles, pistols, and shotguns in such volume that they are shipped to the most remote corners of the earth. Proudly, they bear the names of their makers: Ruger, Colt, Winchester, High Standard, Whitney, Mossberg, and Marlin. The same basic methods of production set up by Whitney in his manufacture of the 10,000 Charleville pattern flintlock muskets with interchangeable parts is used by them all. Even with new machines for precision casting of high-strength steels and light alloys; even with broaching and button rifling far faster in production than the sine-bar rifles of the Whitney factory during Mexican War days; still the work of Eli Whitney underlies modern production methods. The mark of Eli Whitney is in the milling machine, basic machine tool of every factory. The mark of Eli Whitney is in the double-spindle profiler, used by Whitney's son, Eli Junior, when the young man just out of Yale undertook a contract from Samual Colt to make big revolvers in the Whitney Armory. From Whitney, through a dozen shops still existing and a hundred factories long since tumbled into dust, did the mark of Eli Whitney touch the manufacture of firearms and, ultimately, every other manutured article of metal produced by machines anywhere in the world.

Tools from Robbins & Lawrence, tool makers of Windsor, Vt., and Hartford, Conn., founded the industrial might of the Mauser works, and built the production power of England's Enfield Arsenal. Tools from Pratt & Whitney built rifles for the Empress of China, and ground out tens of thousands of revolvers made by names now forgotten, such as Hopkins & Allen and Forehand & Wadsworth. And in all the factories, including those now in business, tools of Whitney's basic invention and use, improved by the genius of a thousand Yankee mechanics, shaped the arms of America.

When Whitney began turning out his machine-made muskets, he was confronted with the problem of producing, by machinery, a weapon with workmanship equal to that of the same muskets being made by hand by other contractors. The gunsmiths had set the

standard for the manufacturer long before there was a manufactory; and, even now, seven generations later, standards established by custom gunsmiths still persist, more or less, in modern arms manufacture.

As the concept of machine-made guns with the interchangeable parts was accepted, plants began springing up throughout Connecticut like mushrooms after a warm spring rain. Some of the plants lasted scarcely longer than a mushroom on the plate of a gourmet, as shooting men spurned guns that were poor in workmanship, design, or reliability. There were plenty of good gunsmiths around to provide a man with a gun he could depend on and be proud of.

But the machine-made weapon was gaining in public favor. If the marriage of wood to metal was slightly less precise in the mass production gun, the shooter might still accept it if it cost substantially less than the product of the gunsmith's shop. But workmanship could not deviate greatly from the uncompromising standards of the gunsmith or it would find no acceptance at any price.

The manufacturer is keenly aware that he must provide a weapon which is not only functional but which will be a source of pride to its owner. The gunsmith's pride in his product still lingers about the modern gun plant, just as the old time gunmaker looked on himself as a mechanic apart from other workmen. So do the top executives and the young sport-shirted lathe operators in gun plants today consider themselves a breed apart.

"It's a business for gentlemen," was the way William B. Ruger summarized his feeling toward the gun industry. With those words, the head of Sturm-Ruger & Co. paraphrased an intangible feeling, seldom voiced, that forms a common bond among the mass production gun makers of Connecticut. By the word "gentleman" Ruger did not refer to the polished dilettante with a studied set of manners. He used the term to denote a type of man possessing the spirit, pride, taste, and sensibilities of an aristocrat. He classed gun making with ship building, aircraft manufacture, and other crafts associated with romance and adventure. This does not mean that Ruger or any other gun manufacturer in Connecticut has a completely visionary approach to arms manufacture; there is nothing intrinsically wrong with making money—and guns must be designed and built with profit in mind if the manufacturer is to stay in business.

In a young enterprise like Sturm-Ruger, where it is possible to talk directly with the founder and designer, it is not hard to uncover a philosophy of gun making. That philosophy is incorporated in the

Centers of gun bugs' interest in Connecticut arms factories range from the newest modern shops like Whitney's to older firms such as Marlin's, Mossberg's, Colt's, and the small Ruger works headed by one man.

Gun - making machines, by 1858 when Colt sidehammer was built, duplicated curves of elaborate handmade guns.

thinking of one man. But in the large, old plants, like Colt's and the five other production gun plants in the state, the men who direct the activities of the companies seem also to be aware that they are in a business different in certain respects from other profit-making endeavors. Though primarily manufacturers and businessmen, they sense the strong ties with the past that still exist in modern firearms manufacture. Unanimously, they aim to make good, reliable guns that can be competitively priced, and they try to sell as many of them as they can. From a strict business point of view, they approach the problem as clinically as if they were marketing shoes or safety pins. But they are not out for profit at any cost. Like his prototype of yesteryear, the ruggedly independent gunsmith who would sooner let his guns stand in the rack than sell to a man he personally disliked, most gun manufacturers prize personal relationships as well as sales.

I became aware of this at Colt's one day while discussing an entirely unrelated matter with Tom Turner, director of customer relations. The day before, Turner said, the company had received an abusive letter from a Colt dealer who had used obscenity in his communication. "He'll be dropped from our dealer list," I was told. "We don't want a man who can't control himself handling our guns."

Just as Colt's expects its dealers to reflect credit on Colt guns, the dealers expect Colt guns to reflect credit on the dealers who sell them. Colt's public relations director, John Millington, says, "The philosophy at Colt's is to turn out

Mass-produced revolver made during Civil War by first Whitney Armory was all machine-made like today's guns.

the best product possible. I definitely believe that the attitudes of Sam Colt have lived and left with us an abiding desire to keep the Colt name second to none." But more than the attitudes of Sam Colt are at work among the Connecticut gunmakers—behind it all, as the first mass-production arms *manufacturer*, is Eli Whitney.

Eli Whitney's success with interchangeable parts and the advent of the percussion system of ignition, ushered in the day of the inventor and the era of the firearms oddity. The U. S. Patent Office was kept busy with applications from inventors who were granted patents on 540 firearms variations for single-shot breech-loaders alone between 1836 and 1873. There was a corre- (*Continued on page* 62)

Simeon North flint contract pistol made for U.S. was interchangeable in all its parts as required by Army.

Keith (right) pays tribute to Col. Townsend Whelen (center) and Gen. Julian Hatcher, deans of firearms research and gun writing.

Keith ON BIG BULLETS

NEVER SEND A BOY TO DO A MAN'S WORK, OR A SMALL BULLET TO DO THE JOB OF A BIG ONE. THAT'S KEITH'S GOSPEL

Big double rifles like Woodward & Sons bottom-lever .577 above have long been choice of European hunters for dangerous African and Indian game. Note comparison of .577 loads with 150 gr. .270's.

By ELMER KEITH

EXPERIENCE is the best teacher. When you learn the hard way, you don't forget.

During 45 years of big game hunting, during which I guided and outfitted hunters from Mexico to Alaska, I have seen just about all manner and types of rifles and loads used on the various American game animals. I am not one of those hunters who boast of having killed thousands of head—I have taken only 140 big game animals for my own use, for meat and trophies—but, in addition, I have seen between 700 and 1,000 head killed, And since hunters all have different ideas about equipment, these animals were taken with a representative variety of rifles and loads.

Over the years, people have gotten the idea that I have used nothing but heavy calibers and heavy bullets on game. This is not true. I have used nearly all of the small bore, light bullet, high velocity rifles also; or I have seen them used by men I was guiding. It is from experience, not just from prejudice,

Leading gun writer Keith, who says "I like the big ones best," shows preference by racking four big-bore express Sharps rifles on wall of room. Author holds a tang-sighted .32-40 Pope Ballard, favorite for accuracy.

that I say without reservation, "I like the big ones best."

Today, only Col. Townsend Whelen, General Julian S. Hatcher, and myself are left of the old school of Gun Editors. Together we have seen the high velocity era from its beginnings: first, the .30-06-150 grain, the .22 Hi-Power Savage, the .250-3000 Savage, the .280 Ross; then the famous Newton series of .22, .256, .30, and .35 Newtons. Except the .22 Newton, I used all these rifles and loads personally on game; and in 30 years of guiding, I saw hunters use them all many times on the various species.

About 1924 or '25, the Super .30 came out in Britain, later to be changed in shoulder shape and known as the .300 H & H. I had two fine Hoffman rifles built for the old abrupt-shoulder Super .30, and later owned several more rifles for the .300 H & H. I worked with John Dubiel on his .280 Dubiel and .276 Dubiel made from the .300 H & H and the .275 H & H cases. Still later I helped C. M. O'Neil and C. V. Schmitt develop the first .250 Magnum in the .250 O'Neil. Following this, in company with O'Neil and Hopkins we developed the .265, .285, .333, and .334 O.K.H., and later the .424 and .475 O.K.H. During this time I also used most of the old calibers on game for comparison.

One season on mule deer and coyotes convinced me the .22 Hi Power was not my kind of weapon, and I dropped it. Then I tried the .250 Savage with 87 grain loads. Three mule deer each required two well placed shots to kill. A cow elk facing me at 60 yards took the

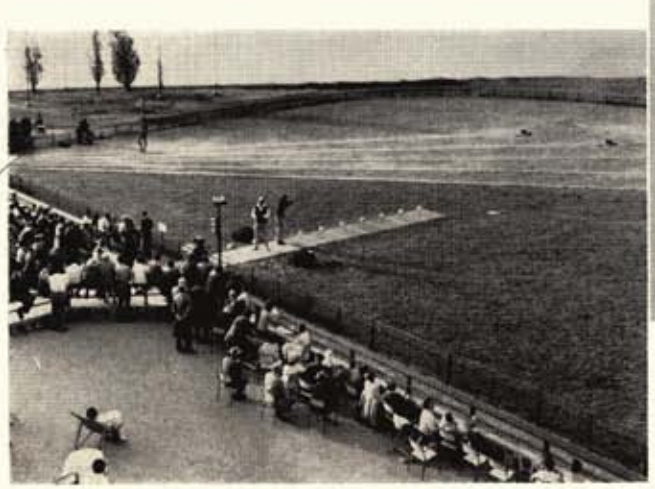
Record bison bull (above) was killed by Keith with big .45-120-566 Sharps shown. Huge Colorado elk (left) was taken by H. B. Marett of Urbana, Ill. Antlers have spread of 58½ inches and each is 12" in circumference at base. Rifles (below) are (left) .333 O.K.H. and .476 double taken by Keith on current African hunt.

little pill square in the center of the neck, but the 87 grain bullet blew up. Part of it came back out the brisket; I saw another fragment kick up dust between her front feet; part of the bullet went back into the chest and broke two ribs after it blew up on the neck bone. The cow dropped, but was up again instantly. I then shot her broadside through the neck. Again she dropped, but I had missed the spine. After each shot, I walked up about 20 yards and, when she jumped up again at 20 yards and whirled to run, I chucked the rifle and pulled my old sixgun. Using both hands, I planted a slug just back of her right ear that went on through the brain and did the job.

That, and two coyotes I lost shot through the body, was enough for me. In comparison, the little 6.5 Mannlicher with its long 160 grain slug at 2000 feet or less velocity, killed well for me, on deer, elk, and bear.

Next, I tried the .280 Ross with its old 143 grain copper tube bullet. It was dynamite on deer and coyotes and all similar size game if it hit almost any place in the body, but on elk it would kill when the chest was hit but failed miserably when a raking shot was taken. It simply blew up in the paunch or hams. One grizzly I saw shot with it, took one in the left shoulder. It broke the shoulder but did not go on into the chest cavity, and he was one mad (*Continued on page* 44)

Winner of Prix d'Abbeville, Italian shotgunner Bornaghi selects his superposed gun from rack. Doubles are popular; some Browning, Breda automatics are seen at shoots like recent world championships at Venice's Lido club by Adriatic sea.



GUNNING EUROPE'S "LIVE BIRD" RACES

TOUGH TARGETS, BIG PRIZES, DELUXE RANGES MARK EUROPEAN PIGEON SHOOTS

By COLONEL LEON MANDEL

THE AVERAGE AMERICAN, shooting flyers in Europe, is impressed by the difference in background and facilities which exist in the European countries. These are in sharp contrast to those in the United States. In France, Spain, Italy, and Portugal, the club houses and the fields for flyer shooting are very beautifully equipped in every way. They remind the American shooter of our golf clubs, although perhaps not quite as large. In nearly every one there is a good restaurant; there is a bar; there is a terrace for spectators, with a separate enclosure for shooters. And of course there is always the betters' pavilion, which is separated from the other shooting facilities. To enter this section, a fee is required from those who wish to bet, and it is the custom to bet on every bird that is shot or shot at.

There is usually an armory for the guns, with one or two thoroughly equipped armorers in charge. They clean the guns each night for a small fee, and repair them when necessary. They also sell shells as needed. There are racks to hold the guns, which are always left in them overnight and through the shoot, and there are additional racks in which the shell boxes are stacked. Every comfort is provided for the shooter.

These customarily fine (*Continued on page* 43)

"FLYER" SHOOTS

Comparatively few Americans are familiar with "Flyer matches" —shotgun match shooting with pigeons as targets—yet it was the first and is very probably the world's toughest shotgun competition, and it is certainly one of the most popular of the shooting sports in Europe.

The average pigeon ring is a semi-circular arena with five traps, set five yards apart, from which the birds are released. The shooter stands on a walk which is graduated in yards so that handicaps can be set up. Distances of shooter from traps range from about 28 to 35 yards. The shooter is allowed two shots (if the second shot is needed) at each bird. He must drop the bird inside the fence which surrounds the shooting area and which is never less than 16 yards from the traps. The average match is a 10, 20, or 25-bird "race," and typical winning scores are 23 or 24 out of 25. Scores of 25 x 25 are rare. An average of 90 per cent is very good.

In the European Live Bird Championships held between September 14th and 23rd at the Lido Venice, Italy, Giovanni Bodini, Italian, was the only one of 208 shooters to kill 20 x 20 and thus won alone. Lindsay Donaldson, U. S. A., was one of 12 shooters with 19 x 20 to tie for 2nd through 13th place, and Homer Clark, U. S. A., with 18 x 20 divided the rest of the prize money with fifteen others.

In the Women's European Championship, five women tied with 9 x 10 at the end of the regular event, which necessitated a five bird shoot-off. Despite having shot 20 birds with the U. S. team that finished fourth in the Match of Nations, Carola Mandel, U. S. A., went five birds straight in the Barrage to win alone, 14 x 15. Maeve Wallis, France, present Women's World's Champion, was second with 13 x 15.

This final victory over most of the best women shots in the world culminates an amazingly successful European trip for Carola Mandel. She has won six major men's championships, shared in the top prizes over twenty times, and won the women's prizes nearly everywhere she has competed.

Pigeons are kept in roosts at Deauville Club until put in traps at time of shoot.

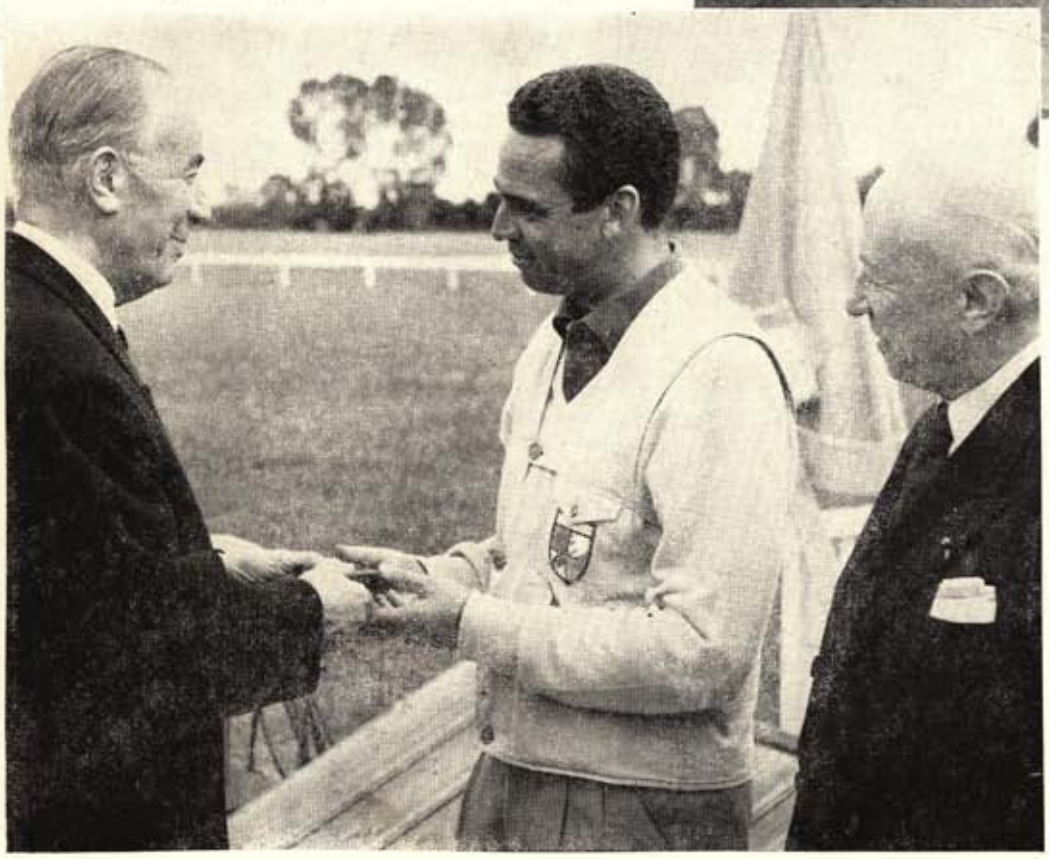
Dapper Count de Talhouet used side-by double to win Prix de Trouville at Deauville, southern France, shoot.

Gala day of flyer shoot at Venice club finds the spectators lining the balcony of club restaurant. Big shell in background is pavilion for betters.

Finishing fourth in Match of Nations at Venice was U.S. team. Smiling top guns are Homer Clark of Alton and Carola Mandel of Chicago, Illinois, and Lindsey Donaldson.

Prince Caraman - Chimay of Belgium, the author and Frence's M. Blanc split 1st in *Prix M de Woot* bout.

Accepting Grand Prix of Deauville from city's mayor is Monsieur Crocco, while gun club president looks on. Flyer shoots are important gunsport events in Europe.



Typical European club, as at Venice, has armory where guns may be kept between matches, are kept clean by armorers.

YOU TOO, CAN BE A "TRICK"

By CLYDE G. HOWELL

Quick draw is riding a high wave of public interest today, but it is little more than a window dressing for exhibition shooters, who must attain almost incredible accuracy.

HAVE FUN WITH GUNS

SHOOTER

THERE ARE TRICKS TO THE TRADE, BUT "TRICK" SHOOTERS DON'T CHEAT . . . THEY PRACTICE!

MANY YEARS AGO, at the tender age of 11 years, I started down the gun-smoke trail with a single action Frontier Colt "borrowed" from my father. After a steady diet of Zane Grey "westerns" and other tales of the gun-slinging western wizards, that gun was a natural selection. But I used it for another reason as well: it was the only one I could "borrow" without detection.

It was natural, too, that my interest in gun work centered first on quick draw. After all, from what I had read, what else mattered? Wasn't it sheer, blinding speed in getting the gun out of the leather that had made Wyatt Earp, Bill Longley, John Wesley Hardin, Wild Bill Hickok, and my other heroes such stalwarts? Hitting the target? Well, that must just come naturally; nobody ever said much about it in fiction; it was taken for granted.

My set-up for fast draw practice was in my upstairs bedroom with the door prudently closed. I stood facing a full-length mirror, with a bed between me and the mirror. The bed was a safety device, of a sort. It caught the big gun whenever it slipped out of my fingers—and I learned early that the resounding clatter of the gun when dropped on the floor brought embarrassing questions from below-stairs.

The gun was empty, of course, in those early sessions. Money for ammunition wasn't easily come by in those depression years of the '20's, and I stuck (perforce) to dry firing. But I did work up to a pretty respectable speed "on the draw." I had read about "the match-box trick"—balancing a match-box on the outstretched gun hand, then snatching the hand away to draw and fire before the box hit the floor—and I got so that, according to the testimony of the mirror, I could do it. But the mirror testified *against* me, too. As I took time to study that mirrored gunman more closely, I became unhappily aware that many of those fast draws ended in shots that would have flown far wide of a target—mostly into the ground at the shooter's feet.

I realized then that the western writers had omitted a point of considerable importance. You have to hit to be a hero—and hitting doesn't just come naturally; the gun doesn't point itself; accuracy can't be taken for granted. (I learned later that you have to hit to be a hero in exhibition shooting, too. Miss a few targets and the crowd isn't going to care how fast you handled the gun.)

Ammunition was essential if I was going to solve this

Aerial shooting with handguns demands muscular coordination, instant sight alignment, perfect triggering—and practice, practice, practice, practice.

problem of accuracy, and I'm not proud of the way I got over that hurdle. But a boy's conscience can be pretty elastic when it encounters something he wants very badly. My father was Captain of a National Guard company, and the armory contained thousands upon thousands of .45 cartridges. Through certain channels (not exactly "through channels" in the Army usage) some of those cartridges began to filter into my possession. The immediate difficulty was that those short, rimless .45 ACP rounds wouldn't work in the Single Action. But I had seen the half-moon clips that held three rounds of rimless ammunition for use in a revolver, and I "found" some of those for my purpose. They were too thick "as issued," but a session at the grindstone cured that and there I was with a whole armory full of ammunition waiting to feed my hobby. I fired a few rounds by remote control (by means of a string pulled from behind a tree) to make sure the gun and ammo really would fire safely, and then I sneaked out behind the barn to start my post-graduate course in gunslinging.

My method was one I had worked out as the best possible way to shave split seconds off the draw time. I started cocking the instant the gun started up from the holster, and released the hammer by letting the hammer-spur slip from under my thumb. This was supposed to happen at the instant the gun came into line with the target. This was "slip shooting," said to be the fastest possible way of firing the Single Action in the quick draw and (also allegedly) the method used by all the great gunmen. I had the trigger tied back to save another fraction of a second by eliminating the need for finding and pulling the trigger.

But one of those half-moon clips stuck slightly as I drew and cocked—the hammer slid from under my thumb too soon—BLAM!—and my leg buckled. I histed up my pants leg to stare at a long but fortunately shallow wound through the meat of my upper leg, and another in the calf. That second gash held the bullet, visible as a blue bulge less than an inch beneath the skin.

My father had some pungent comments to make about "this foolishness." So did my mother. So did everybody, including the doctor who cut the slug out of my leg. I began to wonder if some of what I'd read and some of what I'd figured out for myself might not be in error. Maybe tied-back triggers, filed-down sears, slip shooting, all those tricks of the trade, weren't of first-rank importance after all. Maybe the first thing was to learn to shoot safely and hit what you shot at. (I still don't know the final answer about those "tricks of the trade" I mentioned, and all the other I've heard of. I do know that I got a lot better accuracy, in my later efforts, by using the trigger than I did by slip shooting or fanning or any other method; and I was suddenly a great believer in "the well-placed bullet!")

The years slid by, and money became a little more obtainable, and I turned to more modern weapons. After a long and painful period of saving, I bought a Smith & Wesson K-22, a belt and holster from S. D. Myers of El Paso, Texas, and a case of .22 ammo through the Director of Civilian Marksmanship. After a considerable amount of practice, I found that a shot could be touched off pretty fast with this artillery, too, much as it might have been sneered at by certain western writers. I tried double action shooting, and practiced it until I could put five shots on a playing card at 12 feet as fast as I could count them. No slugs in my leg, either. This was pretty good, I figured. Who the heck was this guy, Wyatt Earp, anyway?

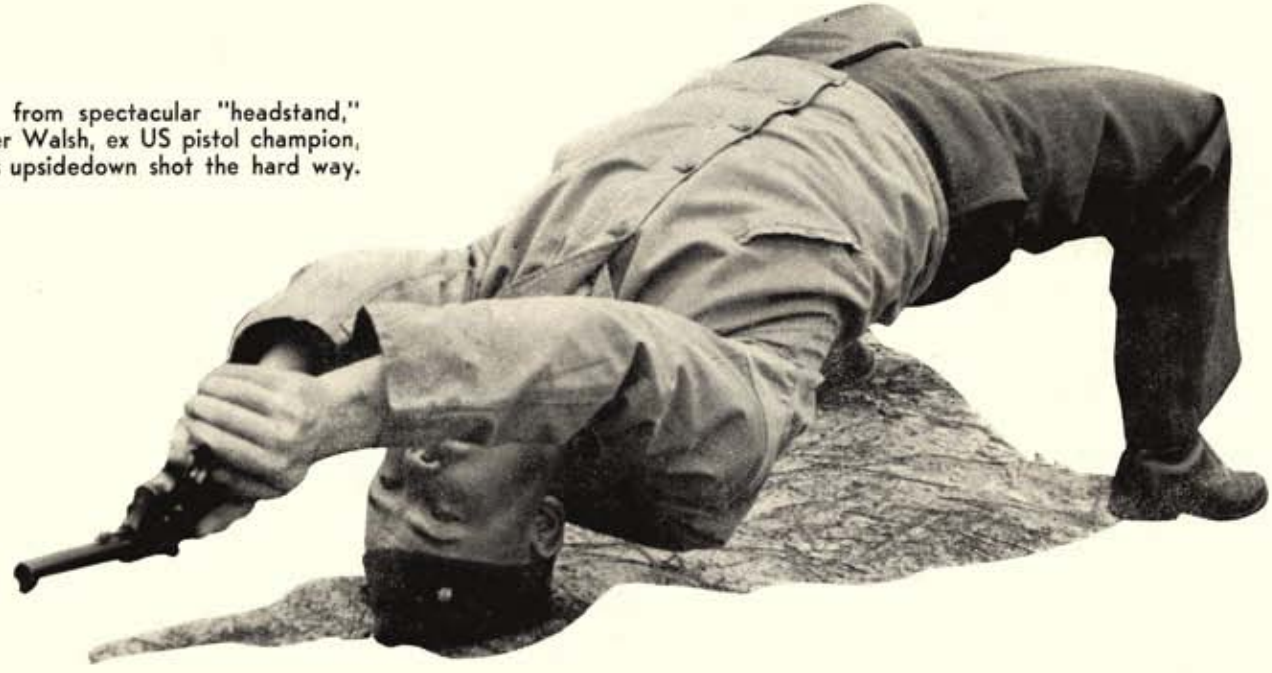
Then I bought a copy of "Ed McGivern's Book on Fast and Fancy Revolver Shooting," and discovered there were people who could do things with a gun which I would have thought impossible. This book became my shooting Bible. McGivern undoubtedly knew more about handgun shooting than anyone else and could prove it with scientific data. So it was his advice I followed, in place of the trial and error methods of the past, when I took up aerial shooting. It hurt my pride a bit to start with gallon cans as targets, but that's what McGivern suggested, and I did it. The size of the targets was reduced and practice made me more perfect, and soon I was shooting at one-inch pieces of coal. When I got so I could hit these hand-tossed targets with almost monotonous regularity, I in-

The mach-box trick — dropping target from back of hand held shoulder high, drawing, firing before target hits ground — is a sure crowd pleaser.

George Krist uses a mirror to sight bullet on target. Trick lies in making the muscles move to suit the mirror image.

Author's kit includes (from top down) an S&W K-22, a Colt Officers Model .38, and a Colt Single Action.

Firing from spectacular "headstand," Walter Walsh, ex US pistol champion, makes upsidedown shot the hard way.



vested another small bit of savings in a Mo-Skeet-O trap, manufactured by the Routledge Manufacturing Company of Monroe, Michigan.

That Mo-Skeet-O game turned out to be a pretty tough proposition. The targets were not large, they were going-away targets instead of the near-vertical toss-ups on which I had become proficient, and they were hard to hit.

Research was needed, and I turned to a .22 rifle to find some of the answers. I learned a good deal about sight settings, for one thing. Using .22 shorts, as I was doing for reasons of economy and range limitations, targets flying within 10 or 15 feet were easy but those thrown out and away were missed often. I learned that, at targets out around 25 feet—rising targets—I needed about an inch of elevation. At around 40 feet, when the targets were falling, sights needed to be lowered to hit two inches low. This data had to be translated from rifle to revolver, and this meant going back to practice at paper targets. I did this somewhat reluctantly, but it helped. When I tried my skill again on the Mo-Skeet-O flyers, I could hit them more often.

This combination of paper target practice and practice on aerial targets gradually paid off to the point where I could score satisfactorily on (*Continued on page* 40)

Man-and-wife shooting team, the Krists, put on crowd-pleasing program, using rifles, shotguns, and pistols.

THE GUNSMITH

August Heym, master engraver, today operates gun factory in W. Germany.

By JOHN FISHER KERR

TIME WAS when gunsmithing was an art, so treated by its practitioners and so recognized by its patrons. Benvenuto Cellini, whose masterpieces in precious metals are among the artistic treasures of the world, was a gunsmith of sorts. Kings down through the ages have cherished and supported gunsmiths as "wards of the crown," to be honored on a par with poets, painters, and musical geniuses. Joe Manton, scion of the great family of gunmaking Mantons, was gunmaker to three kings—George III and George IV of England, and the King of France.

Gunsmiths themselves have fostered this artistic conception of their craft, devoting their time and their skills to the production of perfection and beauty rather than quantity and profit. Every European country has its honored list of master guncraftsmen, and America's list is itself as long as any, and as honored. Men like John Shell, Sam Hawken, William Walker, Harry Pope, Norman Brockway, A. W. Peterson, and A. O. Niedner are among those who earned their places on the Honor Roll of American gunsmiths. Most of these men died poor, preferring to leave the world a few near-perfect examples of their

NOT EVEN THE TERRORS OF A RED PRISON CAMP COULD KILL THE URGE, BORN OF CENTURIES OF FAMILY GUN CRAFTSMANSHIP, TO MAKE GUNS OF QUALITY AND BEAUTY

Example of Heym's skillful carving on .45 Colt automatic shows combination of the traditional floral arabesque with gold inlaid boar, American big game like sheep, cat.

TOO TOUGH TO DIE

Heym's work has lost no firmness despite imprisonment by Reds. Side lock engraving shows master's command of perspective in steel and lifelike shaping of animals.

craft rather than many less perfect guns which could have made them wealthy.

So dominant were these men in their field that, even today, gunsmiths are apt to find that they too are expected to wear the stamp of genius, including its idiosyncrasies. Because they refused to turn out a gun (or a barrel, or a part) until it was perfect by *their* standards, no matter how long it took or how impatient the customer, it is a standing joke in the trade today that "you can take a gun to a gunsmith but you can not get it back!" They were a breed apart, those old-timers; men dedicated to their craft, indifferent to profit, bent only on producing, somehow, a gun that even they themselves could call perfect. They were, truly, "artists for art's sake," and their tribe is decreasing.

In today's world, the climate of business and manufacture is not favorable to the preservation of the individual who, solely by the skill of his hands and the craft of his brain, can evoke from wood and metal a perfect mechanism which is also an authentic work of art. Regrettable as this may be, there is no help for it. We cannot retreat to the old ways. The scientist and the production expert rule this age, and the craftsman cannot keep pace with mass demand. You and I are said to live better and fuller lives because of this.

Nevertheless, here and there in odd corners of the world, the ancient skills are preserved, and one may find a man whose father and grandfather, and their sires before them, practiced a craft which now is all but lost.

The making of fine custom arms is one such art, and one of its foremost modern practitioners is August Wilhelm Heym, whose little factory in Munnerstadt, Bavaria, turns out some of the finest examples of the gunsmith's craft to be found in the world today.

The firm of Friedrich Wilhelm Heym has occupied its present site for only a few years, since it was uprooted from its (*Continued on page* 42)

Typical Civil War "Skirmisher" sports chin whiskers, fires old rifle, but bites latest 1957-designed "minny ball" from paper cartridge for loading prized musket.

Civil War

Battle near Lexington, Missouri, early in the War is annually re-fought by military school cadets who mix M1s with muskets. Anderson house, pictured below, was Union hospital during fight, is now being restored.

Guns Blaze Again

REENACTMENTS OF OLD BATTLES, AND MATCHES PITTING MUSKETS AGAINST GARANDS, MIX MARKSMANSHIP WITH HISTORY

By WILLIAM B. EDWARDS

Man of Huron Rangers, in 1861 "Co. E, Fifth Michigan," fires M1861 Special musket at Greenfield Village shoot.

AS AMERICA nears the centennial of the bloodiest war in our history, it comes as a surprise to some and fun to others that the Civil War is being fought again. This is not just talk, this is action. Across fields where once the zip! of "Minny balls" kept soldiers' heads down, bronze field guns still lob their iron shot into "enemy" ranks, and Yanks in Blue compete with Rebs in Gray for the honors of the day. Muzzle-loading fans, historical and civic restoration groups, are all in the "fight." But instead of the bitterness which marked the fraternal conflict of 1861, today's Civil War is one happy get-together as comrades wearing the Blue and the Gray reunite for another simulated battle.

Current enthusiasm for fighting the Civil War over again is hard to "type." It isn't exactly kid stuff. The arms used are those once carried in the battles which dot our history books, but uniforms are hard to get. The old military goods firm of Bannerman in New York, has, they think, been pretty well cleaned out of Civil War equipment. Replica uniforms carefully sewn by wife or sweetheart, are as authentic as imitations can be of century-old clothes made when homespun was the rule. Leather holsters, cartridge boxes, are either original or accurate copies. And the refought battle may be planned with full comprehension of the original fight.

At Lexington, Missouri, in May, students of Wentworth Military Acad-

Detailed replica 2½" howitzer is loaded by men of 1st Mich. (Detroit) Volunteer Artillery. Gun fires cement-filled tin cans.

Rifles shot by 13th CS Inf'y at Perry were M1855 with Maynard primer; '41 Jaegers liked by Rebs.

Cadets at Wentworth MA reenact surrender of Mulligan to Price after famous battle of the hemp bales in '61.

"Rebs" among cadets wore check shirts, bummer caps, incongruously carried blank-firing Garands to make noise.

Skirmish teams have fife and drum corps. Young drummer beats brisk tattoo during the hectic stake shoot.

emy put on a show drawing visitors from miles away. The first occasion was the historic school's 75th anniversary. The refought battle was a decisive engagement of the Civil War. Some boys wore copies of original Confederate and Union uniforms; others decided the Wentworth cadet uniform looked "antique" enough.

The pioneer jump-off town of Lexington (on Highways 24 and 13, 41 miles east of Kansas City) in the 1860's was a seat of the South's genteel ante-bellum life, complete with planters, slaves, and mansions. One great home overlooking the river and wharf, not far from Masonic College, was that of Col. Oliver Anderson. In September, 1861, Chicago's Col. James A. Mulligan with 2,780 Union troops occupied the key river port of Lexington to split Southern sympathizers in Missouri. Earthworks were thrown up around Masonic College. Confederate General Sterling Price with 12,000 Missouri State Guard attacked Sept. 18, 1861. Using a moveable breastwork of hemp bales, they forced the Union troops to surrender. Anderson House was the Union hospital until captured by Price.

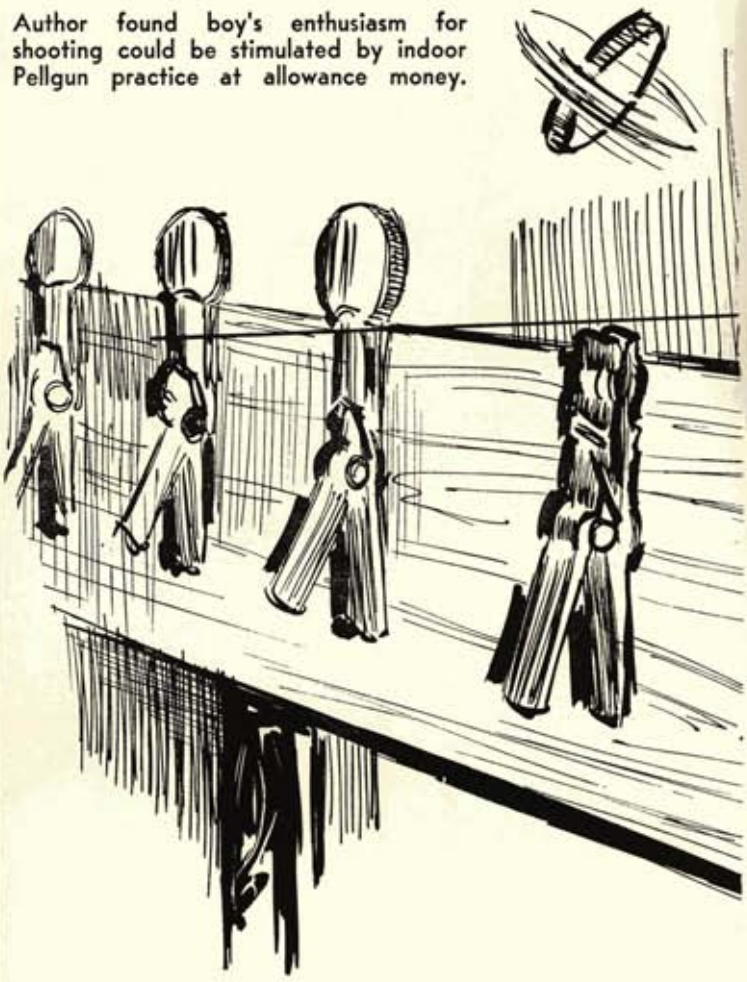
Today, the combat reenacted by Wentworth cadets is to draw attention to the memorial and restoration drive to restore the old house as a museum. Artillery is fired carefully loaded with black powder blank charges. Anachronistic among the borrowed Springfield and Austrian muskets are the cadets' M1 Garand rifles. Shooting blanks, they supply the noise but lack the authenticity important to another group of gun fans playing Yank and Reb. These are the nearly forty competitive shooting teams which form the ranks of the North-South Skirmish at Camp Perry, Ohio.

Recent Skirmishes have been the high points in the activity at Camp Perry National Matches. When a double file of men tramps briskly along the road from the huts-ments, led by the drummer boy rolling a natty tattoo on the snare, and the battle flag of the Confederacy whips in the Lake Erie breeze, the Sunday visitors from town sense that they are about to witness a page from history. For all its dress up and make-believe, (*Continued on page* 54)

Watching small muzzle-loading brass howitzer being fired at old frame house is Frank Straker, self-appointed "Rebel" from South Jersey. Ames swords carried by artillerymen were used in War. Below, line of battle forms by Confederate battle flags as teams engage in stake shoot at Camp Dix, N.J.

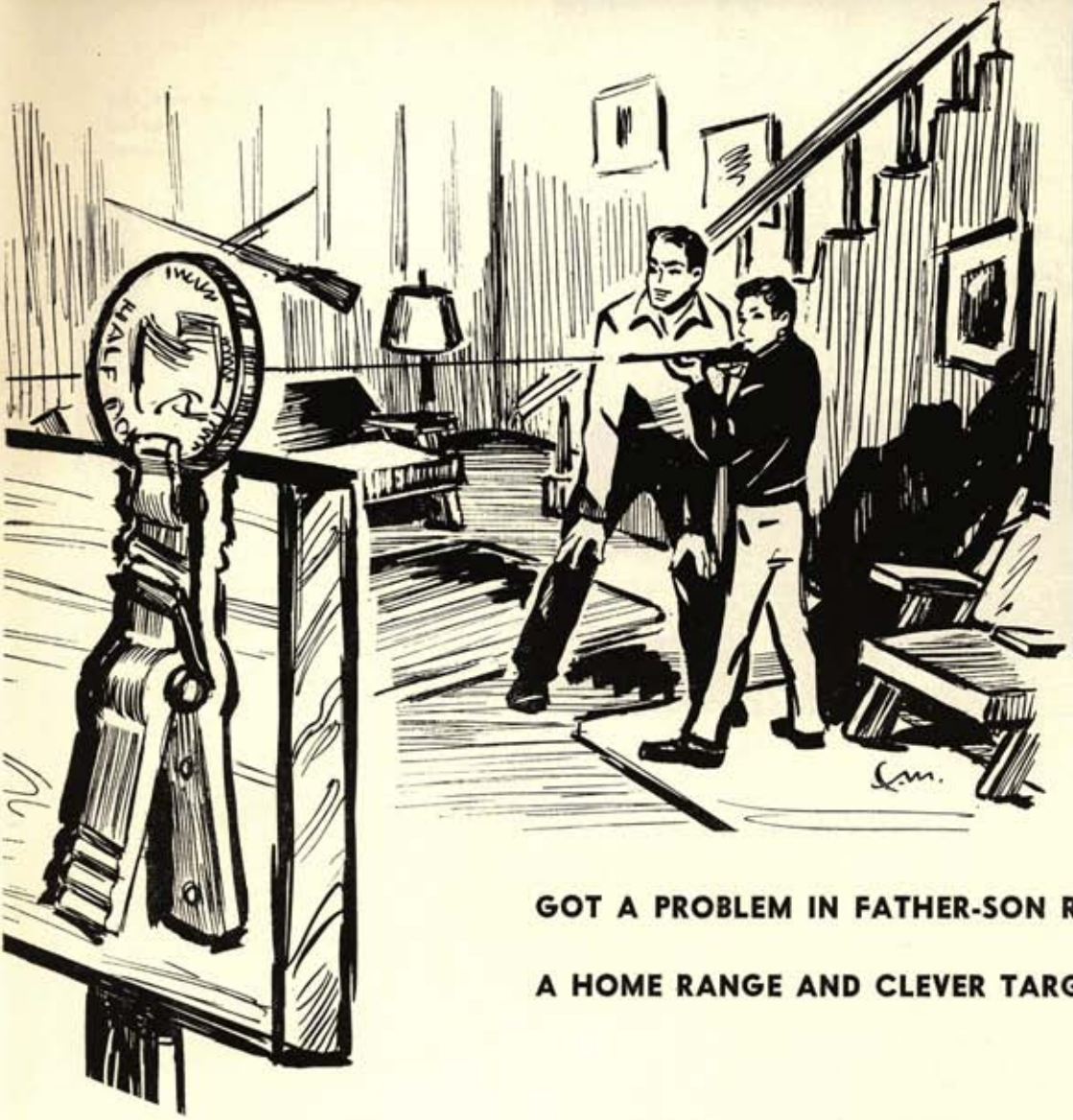
Shooting at home is practical when baffle box is used to cut down sound. Cellotex slabs break up noise of gun in Illinois auto salesman Ralph Mears' basement range.

Author found boy's enthusiasm for shooting could be stimulated by indoor Pellgun practice at allowance money.



WHY NOT

Heavy bullet trap which is moveable makes indoor shooting practical. Gun Mears uses is light-loaded .44 Magnum.



Acoustic wallboard is used in easy-to-build baffle box which acts as noise muffler.

GOT A PROBLEM IN FATHER-SON RELATIONS? MAYBE A HOME RANGE AND CLEVER TARGETS WOULD SOLVE

SHOOT AT HOME?

By HERBERT J. ERFURTH

A GOOD MANY YEARS AGO, a spindly, overalled, barefooted kid squinted down the octagon barrel of an antiquated .22 rifle and knocked a pine cone hell-to-breakfast off a sun-bathed log. I was that kid, and I'll never forget the thrill of that moment. Since that day, I have fired some sort of gun at least once a month, except during the time spent in military service. (No, that's not a misprint. Like many GI's, I did less shooting in the Armed Forces than out.)

It has been fun all the way; fun when I was a growing kid, fun in all the later years, in the field or at targets, with whatever gun happened to hold my interest at the moment. But it took a growing son of my own to teach me what I really wanted from the shooting game, and what I could get from it.

By the time Ronny was eight, he had been out to the range with me several times, first as a spectator and later as a pupil. Remembering my own cartridge-starved youth, I spent plenty of time coaching him, making sure he got to burn up at least a box of cartridges every week-end. The small-bore target bug was biting me hard at that time, and Ronny spent many an afternoon tied into a miniature version of my own shooting sling, trying to punch out scores with his little single shot.

I still have some snaps taken at the range, showing him with a brave smile on his face and a target in his hand. Maybe it was that smile that finally got through to me. At first, when it dawned on me that he was doing all this more to be with me, or more to impress the other kids on the block, that for the fun of shooting, I couldn't believe it. It was *fun*, darn it! It had been and still was fun for me; why not for him?

We shot, and shot some more. We shot, and then walked down and marked the targets; shot again, squinted through the spotting scope, made corrections, talked some, and went on shooting. He was polite about it, tried hard

Handloading - bench refinements by Mears include scale board seated on peg to convenient eye-level.

not to let me know how bored he was. I was puzzled and hurt, almost angry. I remembered my own boyhood when I cut lawns and washed cars all week long just so I would have plenty of .22 shorts (at 15 cents for a box of 50) for my week-end shooting.

What I was overlooking, of course, was that our formal shooting range, with its shooting benches, scopes, slings, pads, and target frames, was as different from the cool green woods and grassy hillsides of my own childhood as night is from day. I forgot that an old turtle sunning himself on a log had been, for me, a Sioux warrior; that the stones, dead limbs, chipmunks, frogs, and occasional rabbits of my childhood had been bears and tigers and antlered bucks, each stalked and shot with pulsing excitement. Punching holes in paper targets under stiff range conditions was fun after the bug bit you, but for my boy it was like too many other things in life—all wrapped up in rules, with too much reality and not enough imagination.

Powder measure is screwed to peg block that fits in holes drilled in bench.

I shot mostly alone that summer, and I would probably still be shooting alone if it hadn't been for a trip we took two years later into upper Michigan.

It looked like rain that afternoon, so we camped early, built a fire, and put some potatoes on to roast. The stream made a sharp bend just below the camp, and the opposite bank was high, perfectly designed for a bullet backstop. I had brought my Match Target Woodsman along, packed in with the bedding. I dug it out, sorted out a handful of twigs from our kindling, and set off downstream. Ronny was still busy unrolling his sleeping bag.

I broke off three two-inch pieces of kindling and tossed them into the stream. I know the rule about guarding against ricochets off water, but the bank yonder was high enough to stop anything thrown at it. And floating targets are good fun and good practice. They move; and the bullet splashes mark your hits for you. This spot was ideal for the purpose. The current was fast and tricky, and the little sticks, 50 feet distant, danced and spun as if they were alive. I threw five shots, fast. Two of those were pretty wild, but the next five were better. I emptied the gun, reloaded, fired that, and was just slipping the gun back into its zippered case—it was getting close to time to see about those potatoes—when Ronny spoke from behind me.

"That looks like fun, dad."

I didn't say anything; I was afraid that anything I might say would spoil it. I just handed him the pistol, showed him how to load it. I was too excited to do it myself; and, anyway, he had to learn, didn't he?

We were still there an hour later, both of us with sore thumbs from working the magazine button but both exhilarated by the action, the fun, the renewed feeling of companionship with each other. We had burned up the ammunition I had figured would last me the whole trip, but there was a small town nearby and we stopped there next day and bought all the .22 ammo the man had in stock. I've seldom spent money I was more willing to spend. (The potatoes were pretty well done, but we ate them.)

After that, we stopped whenever the urge took us. On the shore of a lake so big and so lonesome that no ricochet could reach danger, Ronny learned about ricochets and why you shouldn't ordinarily shoot over open water. We pushed into woods and swamps to shoot snakes and sometimes a rabbit. I missed the only crow I ever caught within pistol distance. Ronny's sight- and trigger-savvy from the rifle practice helped him develop quite rapidly into a fair-to-middlin' pistol shot.

Meanwhile, I was doing a lot of thinking. Ronny was obviously having the time of his life. But what about when we returned home? Range work would be work again, not like these games we were playing.

I was right. Ronny went out to the range with (*Continued on page* 57)

In neat, Modern Beretta factory guide Amadi (left) shows 9mm gun to Edwards. Hammerli pistol was bought in Switzerland.

GUNS, PAST AND PRESENT, WERE THE PRIME OBJECTIVES OF THIS UNIQUE GUIDED TOUR THROUGH EUROPE'S ARMORIES

A Gun-Nut's Tour of Europe

By ROBERT PARKYN

"SEE RARE GUNS, buy at low European prices, visit museums and arsenals not open to the public, with the First Annual Gun Tour of Europe," was the promise. Exciting? Yes, and fulfilled. But not through any miracle by Sabena Airlines that all this was done—Sabena got us there but missed a connection—nor was it because our tour conductor Bill Edwards was such a whiz at tour arrangements—he wasn't, and he goofed several times—nor was it our golden key of dollars for travel. Instead, we found a universal element of friendship among the hundreds of gun enthusiasts abroad who made our trip pleasant. That good will by gun enthusiasts may be one of the world's strongest common denominators for peace. Certainly, we found many new friends in lands that had since childhood been only romantic names—Venice, Monte Carlo, Brescia, Neuhausen at the falls of the Rhine, Saint Etienne . . . all these and more were on the Tour. To my wife, Stella, and myself, it seemed like a second honeymoon . . . plus guns.

The Tour started from New York, where we had flown from our home in Burbank, California, to meet the others of the group. Our schedule was by Sabena Belgian Airlines to Manchester, England; then train to London. We met the others of the group—George and Agnes Whittington of Henderson, Kentucky; George Oberfell of Claremore, Oklahoma, and his son-in-law Bob Demming of Kansas City; Roger Dakin, of the Dakin Gun Company, importers of San Francisco; and Val Forgett, Jr., youthful proprietor of "Ma Hunter's," the machine gun seller. The Tour was arranged by Bill Edwards who had met many of the people we visited on previous trips to Europe, or knew of them in connection with GUNS magazine.

Across the Atlantic at night, the trip was smooth, like riding in a bus. I didn't know then how apt the simile was, for we were to cover over 4,500 kilometers via our own 17-passenger Chevrolet bus through seven countries, plus England, before we were through.

In London, our first stop, we visited the Tower, and were welcomed by Mr. A. Norris Kennard, Assistant to the Master of the Armouries. Kennard knows the historical value of guns made since 1800. These plain weapons have

Huge factory in Belgium is where Browning guns are made. Overhead belts drive most machines. Hosts at Fabrique Nationale were director Laloux and young Browning.

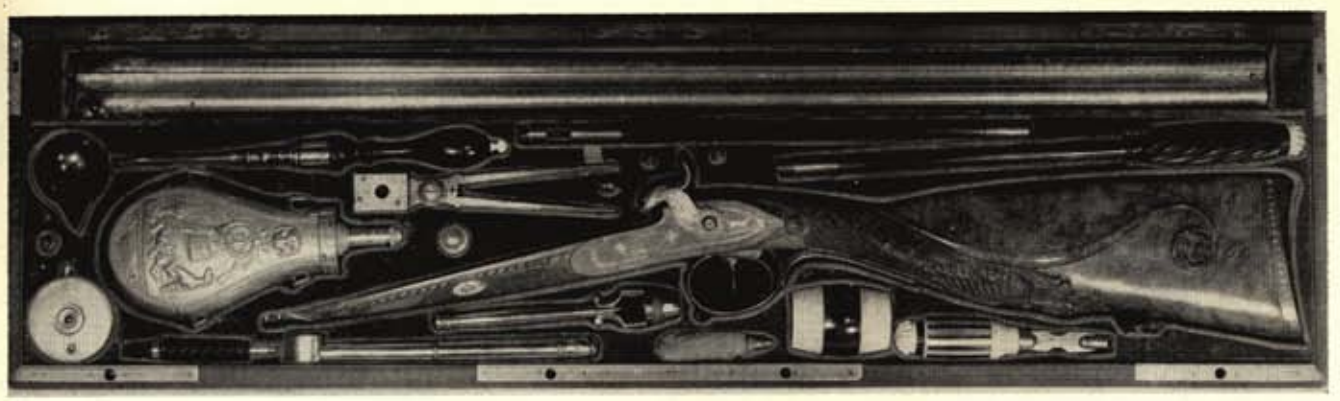
been carefully saved by Kennard in the Students' Room, a big armory with gun racks holding hundreds of muskets and cases full of pistols. I like Colts and was surprised to notice flat-top Frontiers, a squareback Navy Colt, and a brand new Dragoon holster pistol in the display. Stacked in racks, easy to remove for study, are muskets and rifles, many of them unidentified by the Tower experts. The student can browse around and see what he can find. We had much more to see at the Tower, but I've made a mental note to revisit the Students' room some time later; it's worth a long second look.

The rest of the Tower was typically all that Britain implies, including the rain! The "beefeaters," Yeomen of the Guard, were colorful in their Elizabethan uniforms. The crown jewels were too gaudy to be believable. Stella was thrilled to be that close to millions of dollars' worth of the world's rarest treasures, but I couldn't help noticing the electric-eye warning cells in each window of the treasure case. Rare armor was so profuse in the Tower we were almost numb with looking. Unusual among the guns there was a Germanic "kentucky" rifle. There was some question about its authenticity. Was the gun American as it was claimed to be? Some Kentuckys were made by gunmakers fresh from the old country, and style and finish would prove very little. None of us could afford more than opinions and conjecture, and we left the Tower with its mystery unsolved.

We hit Enfield Royal Small Arms factory next day in a period of transition. The entire plant was being retooled to make the FN automatic rifle which has been adopted by the English. They laid out a display of machined parts for us to examine. The receiver was beautifully machined, the whole gun combining modern, high-speed, streamlined, efficient manufacture with "British craftsmanship." Even in Britain's government arsenal, emphasis was on quality manufacture.

At Enfield we were shown great hospitality, including dinner in the special building reserved for wining and dining visiting firemen. The visit ended at the Museum, filled with Enfield and other arms collected since its founding 100 years before, in 1857.

The next day we visited Birmingham, center of gunmaking. There was, again, too much to see—in fact, too much to see and too little time to see it was the main hardship of the Tour. Of all the things we could have seen, the ones we did see were trip highlights. We visited B. Webley and Scott, pistol and shotgun makers; W. W. Greener, shotgun makers; and Parker-Hale, an English combination Stoegers and Bannermans. They supply the British shooter with just about everything he needs. Fellow tourist George Oberfell—he is the same Oberfell who recently wrote a book on "The Mysteries of Shotgun Patterns" and is an authority on shotguns—ordered a (*Continued on page* 47)



Magnificent cased fowling piece made about 1850 for wealthy Dutchman is preserved in Liege; was one of hundreds of rich specimens seen in Europe's museums.

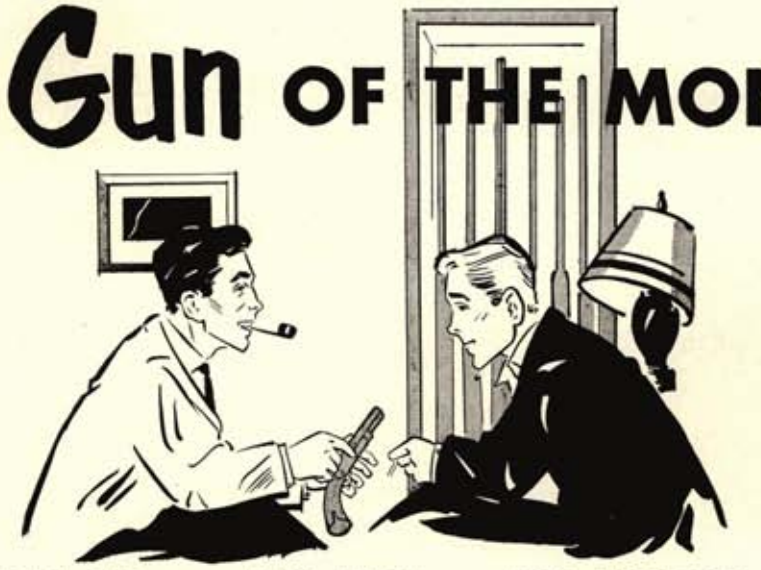
Rich garniture of diminutive flintlock coachgun made about 1730 for Italian nobleman's carriage was among treasures preserved in London museums. The stock folds. Tower collection including Students' Room proved fascinating to Tourists.

Merging of old and new was accomplished at Beretta works in Italy where buildings are in form of Renaissance fortress. By factory's gate are Agnes and George Whittington, my wife, Sella, Bob Demming, Roger Dakin. Factory was very clean.

Thousands of cheap pocket pistols were made in Liege, center of Belgian gunmaking since the 1400's. Bayonet pistol was useful item for defense by travellers against thugs.

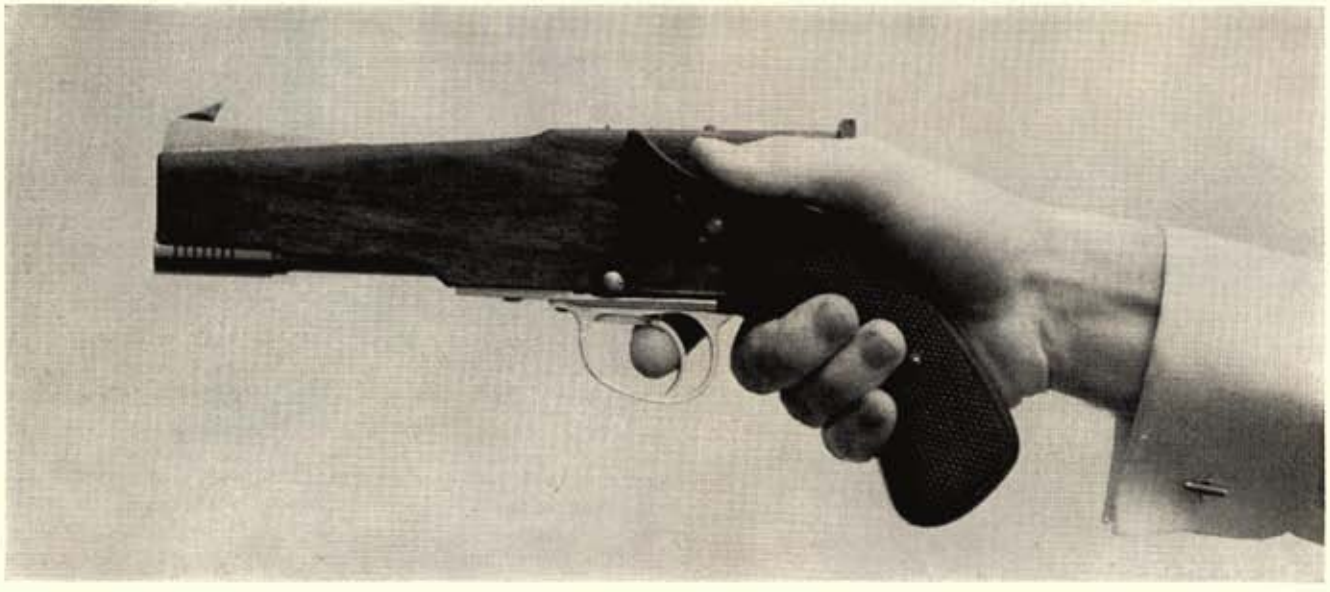
By JOHN L. BOUDREAU

Gun OF THE MONTH



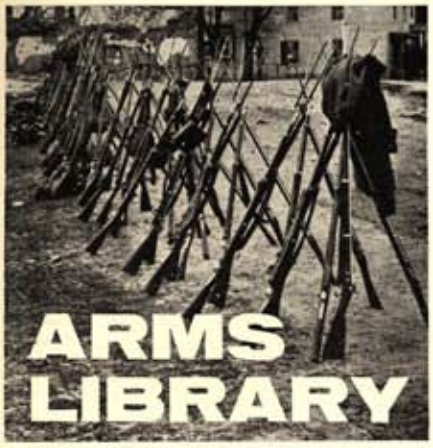
THE OLD • THE NEW • THE UNUSUAL

BETTER THAN RUSSIAN UPSIDE-DOWN PISTOLS, IS THE VERDICT OF SHOOTERS OF THIS "RECOILLESS" LOW-BARREL SEMI-AUTOMATIC



LIGHT WEIGHT combined with almost total lack of recoil "jump" make this five-shot semi-automatic even better than the Russian upside-down pistols which helped wreck American shooting hopes at the Melbourne Olympics. Designed by John L. Boudreau (holder of Master ranking in pistol competition for 15 years; New England representative at the 1948 U. S. Olympic qualification matches at Quantico), this gun weighs only 20 ounces, is 11¾" in overall length (8½" between sights), shoots .22 Long Rifle, regular, or shorts without change other than swap of magazines, loads from the top from five-shot magazine. Barrel is in line with shooter's arm, eliminating tendency of high-barrelled guns to roll up and back in recoil. Slant of grip also helps control jump. Other target pistols, including Russian upside-down models, use weight as steadying factor, but this model achieves the purpose without muscle strain on shooter's arm.

Test models of this pattern in 9 mm and .45 caliber autos indicate that the design can be equally effective on heavier sport and combat weapons. Light weight, natural pointing characteristics, and lack of disconcerting recoil should greatly reduce time presently required for training men for effective use of handguns, and unique target characteristics should make this design a top favorite for competition, might help us win the next Olympics, providing recent rule changes can be repealed to permit its use. Gun is not in production; patents are pending.



INSIDE THE CONFEDERATE GOVERNMENT

The Diary of Robert Kean.
(Oxford University Press, 1957)

The fact that Robert Kean was chief clerk of the Bureau of War, a division of the Confederate War Department, may lead some gun fans to seek for firearms and ordnance material in this book. Aside from one excerpt referring to a rocket launcher in brief, scanty detail, and one or two passages mentioning arms captured or lost at Fredericksburg or Vicksburg, this book will be a disappointment to the arms collector. But for the student of the times in which many collectors' arms were used, this book has a greater value. Kean saw many men whose names today are often meaningless, at first hand under the stresses of a great war. His often terse but succinct comments on these men, their personalities, what the gossip of the times said they should have done or not have done, are welcome additions to our store of literature and information on the American Civil War. Perhaps of greatest interest to the arms student is Kean's critique at the end of his diary on abuses of the Federal Constitution by the Federal Government after the War was finished. He quotes Article 2 of the Bill of Rights, ". . . the right of the people to keep and bear arms shall not be infringed." Says Kean with some consternation, "The South are not only stripped of arms, but a gentleman going on a journey has to get a permit from a provost marshal to wear a pistol for his personal security against robbers." Says Kean in astonishment, "I have seen this done." Thus do coming events cast their shadows!—WBE

NORTH AMERICAN HEAD HUNTING

By Grancel Fitz.
(Oxford University Press, New York. $4.75)

Opening with an Author's Foreword in eloquent justification of sport shooting, this book is a collection of autobiographical adventure stories of the experiences of the hunter who claims the distinction of being the first in history to hunt all of the 24 different classes of North American game legal for hunting. Grancel Fitz received the Boone and Crockett Club's First Prize Medal in 1956 for the Kodiak Island brown bear officially ranked as the largest ever taken by a non-resident sportsman. Collector of specimens for the American Museum of Natural History and the National Collection of Heads and Horns, Fitz is well known as a contributor to many magazines in the men's and outdoors fields.—EBM.

TIN CAN ON A SHINGLE

By Wm. Chapman White and Ruth White.
(E. P. Dutton & Co., $3.50)

This book is a bargain: a bargain in diverting reading; a bargain in biography—that of John Ericsson, designer of the U.S.S. Ironclad "Monitor"; and a bargain, too, for the gun fan, for it tells many of the technical details of that history-making vessel of war which my Confederate grandfather spoke of in derision tinged with awe as "that cheesebox on a raft."

Deriving their information from government reports, documents never before searched, the Official Records of the War of the Rebellion, and rare photographs and prints of Monitors from the Library of Congress and Archives files, the Whites have put together a factual and entertaining book of merit for anyone who is at all interested in the history of our country and the hinges on which its fortunes have turned. The description of the loss of the Monitor off Cape Hatteras is a dramatic finale to a brief career. The engagement off Hampton Roads, the blinding of Commander Worden by a shot at the pilot house, the deep gash made by the Merrimac's (C.S.S. Ram "Virginia") rifle gun bolt which struck the Monitor's turret, are all tinged with the adventure of a bygone era that yet retains an unusual immediacy. The Whites' gloss over one bit of the Monitor's story, the report that a modern skin diver has actually walked her coral encrusted iron deck. By ignoring this with but a passing mention, they ignore a most interesting possibility: the salvaging and refloating of the Monitor which, by today's standards of steel craft, is a relatively small ship. It is one that modern salvaging barges might easily handle; and, put into serviceable condition, it would be a priceless treasure of our nation's heritage. If some one does not seize on the Whites' book as a guide to this salvage, they are missing a bet. But an even bigger bet would be the movie rights, for the visual drama of a straight and historically accurate reproduction of the Monitor-Merrimac fight would just naturally make it a box-office sellout. Whether anything further happens on the Monitor case, the Whites' fascinating book has certainly reopened the matter for current consideration—WBE

THE GUN DIGEST

Edited by John T. Amber.
(Gun Digest Co., Chicago, $2.95)

Fans of the Gun Digest will note that this year's big 12th edition has been jacked up slightly in price, but when they take a look at the mammoth volume, they will consider it a bargain in gun reading. From about 200 pages, Gun Digest has jumped to a whopping 324 big pages, sandwiched between color covers of the new S & W .22 match auto pistol in a painting by James Triggs, one of the foremost firearms illustrators of this century.

Inside are articles covering the field of firearms interest. Bob Wallack contributes several important essays bringing the gun fan up to the minute on what's new in firearms, shotguns, handguns. Colt-omaniacs will relish the scholarly but not dry article by Howard Blackmore on the ill-fated London factory Sam Colt operated between 1853 and 1856. Augmenting published matter in "The Story of Colt's Revolver" (W. B. Edwards, Stackpole Co., $10) and "Colt Firearms 1836-1956 (J. E. Serven, Serven

Books, $15) is a tremendous amount of original documentary information dug out of the British Public Record Office by Blackmore. Photos of guns, the Colt factory today, and a list of presentation British Colts add much interest to the story. Further for Colts is a brief illustrated essay by Colonel Berk Lewis on Walker revolver holsters, and a reproduction in facsimile, full size, of a Colt catalog of the 1890's. The old cuts show parts of Lightning rifles, first appearance of the "Bisley" model before it received that name, and other dope.

For modern pistoleers, "Maestro" Elmer Keith tells the story of the development of the .44 Magnum, a tale that will be no surprise to the old timers in the game, but will amuse some who have noticed omission of Keith's name from some writeups of the latest hot pistol rounds.

Among other writers of note, Jack O'Connor writes on big-horn sheep rifles, Warren Page on reloading and "Doc" Stebbins on selecting a rifle for young shooters. Harvey Brandt brings the Gatling Gun story up to date with the Vulcan electric Gatling and its 1893-patented predecessor, Dr. Gatling's first electric gun. And Bill Edwards contributes a story on the AR-10 Armalite rifle. All in all, this new edition of the Gun Digest is too big to treat in a review. Better buy it and see for yourself.—WBE

THIS IS THE WEST

Edited by Robert West Howard
(Rand McNally & Co., $6.00)

It might seem immodest for an author to review his own book, but since my interest in this particular volume is a small one, (I only wrote the chapter on firearms) I feel, not lack of modesty, but rather an humble pride, to be in the company of such distinguished, famous, scholarly, and eminently readable authors on western topics. The contents page reads like a "who's who" of western authorities today, from the introduction by the dean of sagebrush scholars, Walter Prescott Webb, to Chicago Westerners' genial publications committee boss Bob Howard who edited and wrote the essay "The Land," through such leaders in the field as Don Russell (The Scouts), Stanley Vestal (The Soldiers), Ramon Adams (Cookie—the Camp Cook), Walter Havighurst (The Sodbusters), James D. Horan (The Gunmen), Homer Croy (They Built the Saga), and many others, to the final chapter by S. Omar Barker, "The West Today." GUNS readers will probably not find any radically new information in my chapter on "Shootin' Irons," but the book as a whole is a remarkable canopy on which is painted the whole glorious picture of the American West. It is not a West of fiction and fraud, but a West born of necessity and fed by the cold winds across the plains. It is a West matured by scorching sun and sand, by cowboys and "dogies" and an occasional running iron to keep things lively . . . or deadly. Encompassed in these 25 chapters is an understanding, a comprehension of that miraculous composite of men and nature and history which is the West . . . just so the title, "This Is the West." No GUNS reader who prides himself on the slightest interest in and appreciation for this memorable part of the American way of life, can afford to be without this book. At six bucks it is cheap . . . the appendix list of "The 150 Places to See in the West" alone is worth the price of admission. A tallying of historic, colorful, adventuresome locations accessible by auto most of the year, this list is a guidebook for a vacation. And the visitor who arrives, having already digested "This Is the West," will view these 150 sights to see with increased understanding. It is a remarkable book, prepared by a remarkably fine crew, about that real West that made America.—WBE

YOU, TOO, CAN BE A "TRICK" SHOOTER

(*Continued from page* 25)

or even on cardboard disks offering only their edges to the bullet.

Splitting a flying disk edgewise with a .22 bullet is not easy. It is a lot easier with a .38 or .45 caliber bullet. A lot depends, of course, on how the targets are thrown. I would say that nearly half of the success of aerial shooting depends on the proper toss of the target, whether it is done by hand or by trap. Bad throws can, in fact will, cut hits to a minimum. But let's look for a moment at this matter of bullet caliber and its effect on hits. It is a thing of basic importance to the exhibition shooter, yet a thing seldom considered by those who watch that shooter's performance.

It is a matter of general knowledge that a .22 gun (rifle or pistol) is easier to shoot accurately than the same type weapon of larger caliber. This is a result of lighter recoil, less nervous impact of blast, and perhaps other factors. But the situation changes in exhibition shooting, due solely to bullet diameter. If you shoot a .22 at a target half an inch in diameter, a bullet that barely grazes the target is as much a hit as one which hits dead center. Therefore, the actual diameter of the target area is increased by twice the diameter of the bullet (less a minute fraction). To demonstrate this visually, take a half-inch marble, lay a .22 bullet against it, and pass the bullet around the circumference of the marble without losing contact. A shot anywhere within that circle will score.

Perform the same experiment with a .45 caliber bullet and you will see that, although you are shooting at the same half-inch marble, the actual size of your target area has approximately doubled. A .22 bullet must fly within a circle of approximately three-quarters of an inch to score on the half-inch target, whereas the .45 will touch the marble if fired within a circle nearly 1½ inches in diameter. This principal applies to many exhibition shots. Suspend an object at the end of a thread; cut the thread with a bullet, then hit the falling object. That first shot, at the thread, requires good marksmanship but is a lot less miraculous than it looks when you remember that a bullet grazing the thread on either side will cut (or burn) through it. So your actual usable target is twice the diameter of the bullet; or, in the case of a .38, about .7 of an inch. (Think twice before you attempt to cut a thread stretched horizontally, however. Here you have the curved trajectory of bullet flight to consider, and the shot is many time more difficult.)

This brings us, perhaps belatedly, to the matter of "trick" shooting. A lot of exhibition shooters (amateur and professional) object to the term, "trick shooting," on the grounds that "trick" suggests deception, whereas *their* feats are feats of skill, not trickery. They have a point, because any worthwhile shooting exhibition requires a high degree of skill on the part of the shooter. On the other hand, some shots used in exhibitions require considerably less skill than the average person thinks—other stunts which look simple require far greater skill than some of the spectacular ones—and, finally, some shots featured by some ex-

hibition shooters *are* tricks, dependent on sheer deception. Remember, please, that the exhibition shooter is, necessarily, highly skilled, even if (as is not by any means always the case) he deceives you on some of his shots. The magician deceives you a thousand times as often, and you like it. You don't question the magician's skill; don't question that of the shooter.

The fact that the thread he cuts with a bullet is actually a wider target than you thought doesn't mean that the shooter cheated you; it means that you just never thought about the width of the bullet. Shooting a gun held up-side down is really no harder than shooting one held right-side-up, except for possible awkwardness of position; you use the same sights in both case. True, the point of bullet impact has a different relationship to the sight picture, simply because the sights are set to allow for the pull of gravity when the gun is upright and this allowance is reversed then the gun is turned over—but you allow for this by holding a bit high and your shot scores. This, in itself, might be called "trickery," but it isn't; it's simply "gun savvy."

On the other hand, hitting a mark by sighting through a mirror, or by target reflection in a diamond ring, are exactly as difficult as they look—not because the shots require more gun skill than shots normally sighted, but simply because it takes a lot of practice to learn to move your sights into alignment while seeing them "in mirror image." Everything works backward! Try it, and you'll see.

Almost without exception, you can believe what you see when the shooter starts busting aerial targets. Much has been made of the story, whether true or false, that certain showmen of the past "use fine shot instead of bullets—threw a 'pattern' so wide they just couldn't miss!" Some of the "debunkers" claim they shot "cartridges loaded with salt." The story needs to be taken with a grain of salt, truly—or at least with a seasoning of gun savvy. Even a .44 or .45 caliber cartridge loaded with the finest shot won't throw a pattern wider than a few inches at the ranges used in the exhibitions in question—and flipping shot within even a few inches of aerial targets requires some degree of skill. And nobody I know, certainly none of the publicized exhibitionists, use powder-shot today. They don't have to. They can, and do, hit with bullets.

Some exhibition shooters "spice" their performances with the element of danger. Whether the danger is great or small depends on the circumstances; the important thing is that the audience believes the danger is there. And it is. I question the need for adding "thrill" to skill by shooting targets out of a person's mouth or fingers. No man yet born is totally immune to the possibility of either accident or error, and a very small accident or a very small error can produce tragedy when a gun is pointed within inches or less of a human body. It takes exactly as much skill to clip a cigaret held to a board by a spring clip as to clip one held between the lips of a pretty girl—and the former makes a lot more sense. One accident with a gun outweighs a million shots safely fired, in public opinion; and the shooting sports are heavily affected by public opinion.

To misquote a much quoted and sometimes ridiculed advertisement, "You, too, can be an exhibition shooter." All it takes is practice. And practice. And more practice. And if you love shooting, the practice is almost as much fun as the accomplishment.

If you want to learn to hit aerial targets, remember that "trigger control" is of just as much—more—importance here as it is in shooting at stationary paper targets. Any slight wrong movement of the trigger finger will produce a miss. To be sure, there isn't time for the slow sque-e-e-e-ze of paper target slow fire when you're shooting at flying targets; but there must not be any trigger jerk, either. You must learn to fire with a fast, smooth pull. Double-action shooting is

Trap throws birds at all angles, lets shooter practice without an assistant.

the best way I know to learn how to operate the trigger of a revolver quickly and smoothly. And remember, too, that the trigger *release* must be smooth also. It must be as smooth as the pull, else the shot will be deflected.

Strengthening your trigger finger will help you a lot in double-action shooting, especially for fast double action. I spent many hours practicing with an old, worn out, double action revolver which has a trigger pull of nearly fifteen pounds. It puts muscle where it is needed, not only in the trigger finger but in other parts of the hand where muscle is needed for fast, smooth, double action shooting.

Position (stance) is important in aerial shooting. I try never to move my gun hand and arm independently after they reach approximate shooting position; I follow the target, making sighting adjustments, by moving my body. I lean back a little to follow a rising target, tip forward slightly to follow a falling target. By so doing, I am able to keep my eyes aligned with my sights. Turning a little to the left or right makes the gun follow a crossing target. Body balance must be perfect, and the shooter should approach every shot with his feet properly placed, his body poised, relaxed, with no muscular tension but "cocked," ready for instant, easy movement. A little experimenting will tell you what is the best, most comfortable stance for you. Adopt that position and stick to it.

You'll miss 'em, in the beginning. Even if you're Dead-eye Dick on the 10-ring, you'll miss the flyers until you get the feel of it. But don't give up; keep trying. You say you've already kept trying to the extent of a dozen boxes of cartridges and you still can't hit a quart can in the air consistently? W-e-l-l . . . maybe I left out a point of interest. Did I tell you how much ammo I expended before I got somewhere fairly close to my own ideas of what constituted a good exhibition shooter? Maybe this will make you feel better. As I recall it, I used roughly a bit over 15 cases—or more than 150,000 rounds. And I enjoyed every shot.

What did I prove? Well, maybe nothing of earth-shaking importance; only that an ordinary guy can shoot better than Wild Bill Hickok, if he works at it. He should; he has the advantage of better guns and better ammo. All it takes is—more practice.

But be sure you remember, first, last, and always, to be careful! A bullet in the leg taught me that lesson; you can learn with less bloodshed. And you can have more darn' fun than a barrel of monkeys!

AUGUST WILHELM HEYM—THE GUNSMITH TOO TOUGH TO DIE

(*Continued from page 27*)

former and ancient home in the famous arms center of Suhl in Thuringia, as a result of the Second World War. August Heym, its present head, is the descendant of a line of worthy craftsmen who for centuries added luster to the fame of the old city as the home of fine weapons. Just over two centuries ago, in the year 1750, members of the Heym family organized the firm of Heym Brothers in Suhl; but for several hundred years previous to that, individuals of the same family had been famous craftsmen in the region.

The steady success of a superior product, made of the best materials by men who would probably have been highly insulted by the suggestion that a slight relaxing of their standards of perfection might well effect a larger profit margin, resulted in a continuous growth and enlargement of the enterprise.

Friedrich Wilhelm, grandfather of the present head, in 1865 organized on this solid foundation the firm that bears his name today. Springing as he did, from such a line of guncraftsmen, and with the "art and mystery" in his very veins, it is probably no more than might be expected that he should have devised and patented a type of arm perhaps more widely copied in Europe than any other sporting piece before or since. This was the hammerless "drilling" or three barrelled gun, beloved of the "jaeger" riflemen and down to the present day. Handy, short, and balanced like a fine shotgun, it provided shot for the feathered game or a true-flying bullet from the rifled tube at instant option and as the hunter's luck might turn.

As the years passed, the little firm prospered and diversified its products, and the children and grandchildren of the original workers, brought up in the craft, continued to create masterworks in steel and walnut whose fame spread over the earth, from the court of the Russian Czar to the waste places of Africa, and from the Arctic wilderness to the quail-haunted coverts of our own southland, wherever fine guns were esteemed by knowledgeable gentlemen.

Then there burst upon the world the terrible holocaust born in the mad brain of the Austrian housepainter. Europe flamed and exploded from the ocean to the steppes, and finally to Suhl came the American army. The war was over, but the terror and destruction were not yet over for the craftsmen of Heym. For, as stipulated by the agreement between the Allies, the Americans drew back, and into their place flowed the devouring tide of the Red Army, and the crawling horror of the Secret Police.

The thriving Heym factory was seized by the Russians, and the fate of the workers

New Heym factory in W. Germany has centuries-old tradition of quality.

may be judged by what befell August himself. Thrown into the cellar of a small private house in the neighboring town of Zella-Mehlis with eight other prisoners, he began three months of maltreatment. Those months left their mark, for there is a look in the eyes of one who has suffered which is plainly to be seen forever after. Day followed day in the filthy dungeon, among the packed wretches huddled hopelessly together. Three times a week, in the hours from midnight to three in the morning, the time when the worn body cries most for rest, Heym was dragged forth to the inquisition. Questions, beatings, more questions. Each answer not considered desirable brought the sharp agony of the rubber hose across the head. Then back to the hopeless cell. Men died there, of abuse and by suicide. Their bodies were hauled away in wagons.

Those of tougher fiber endured, as did August, until one day he was brought out for the last time. The Russians had a job for him. All during his imprisonment they had been trying clumsily to run his factory. Thirty men had labored in vain — thirty, where hundreds had worked before. But the number was probably ample, for a mere remnant of the machinery and tools were left. The rest had gone to Russia as spoils of war. So August was set to work by his new masters, to bring order out of the pitiful wreckage, and start the flow of arms to the People's Paradise.

But they misjudged him. Not broken in spirit as others had been, nor ready to buy freedom from abuse at the price of self respect, he bided his time, and one day, two weeks later, he slipped away.

In Bavaria, in the American Zone, the old craftsman started afresh. Nothing was left him of the fine, solidly established family business—no tools, no machines, nothing but the skill and the knowledge and the unquenchable will. But one by one, by ways best known to themselves, carrying with them no more than had their master, came the old workers from the factory in Suhl, a mere handful, but enough.

Ostheim, Bavaria, saw the rebirth of the old firm on this tiny but staunch foundation. And probably of more value than any other possible bit of salvage from the wreckage, was the name and reputation of the business and its heir and head. Gradually, the business grew. The Heym plant produced a large percentage of the once-famous Daly Arms. These and other Heym guns were marketed in the United States under the representation, in the early 1920's, of Ray Riling, now famous as a purveyor of Arms Books old and new.

A Germany rebuilding herself from the rubble of war was sharply on the lookout for every scrap of economic potential to be found, and the Heym firm did not remain unnoticed. Under the armistice terms, a police force was permitted the conquered nation, and the police needed arms, for as many a G.I. who saw and perhaps prospected the vast heaps of confiscated weapons in German cities and villages will recall, guns were about the scarcest item in the country. Police carbines then, on the "Mauser-Heym" system started to trickle from the improvised factory in Ostheim. A small beginning, but it was to be followed five years later by a move to a larger plant which was erected for the firm by the town of Muennerstadt.

Here in a capable and neat plant in the hills of Bavaria, August Wilhelm Heym presides once more over the family enterprise. It is a factory now, makes arms on a modest production basis; but August Heym himself is still an artist, famous the world over for his fine craftsmanship in gun design and decoration. And again the traditional skill of the Heym craftsmen and artists produces sporting weapons of the finest quality, proudly bearing the name "Friedr. Wilh. Heym" to the far corners of the world.

GUNNING EUROPE'S LIVE-BIRD "RACES"

(*Continued from page* 19)

facilities result from a general public acceptance of pigeon shooting and from the support that is given it by the various casinos and resorts. Among Europeans generally there is a feeling that this is an attraction in the same way that golf, tennis or horse racing draw crowds to a city or community, and they are therefore willing and eager to defray expense in every possible way—by putting up money for cups, trophies, and even for cash prizes in addition to the money that is available by the payment of entry fees from the shooters themselves.

There is no more charming sight in the world than a late afternoon at one of these flyer shoots, when the contestants have been narrowed down and about 20 are left. The other competitors are still there, cheering their favorite, and family, friends, and spectators have gathered on the club house lawn to watch the event. There is an aura of excitement about it comparable to our tennis or golf tournaments and, once savored, it is easy to prefer it to the flyer shooting we have in the Western Hemisphere. Much of the excitement comes from the betting. In this respect, it resembles horse racing or jai alai, except that here many of the bettors are also competitors.

Each country has a very strict handicap system, which is based on winnings. In most countries, adjustment of the handicap is made each day, either downward in ratio to the amount of the entry paid out, or upward in the event the shooter has won. The yardage handicap also is increased by an amount in direct ratio with each win. There is very little question ever raised as to the handicap. All the shooters know that this is in the hands of the people who run the shoots, that they are fair, and that the methods by which the handicaps are computed are time-tested and equitable to all shooters. While the technical difference of handicap varies from the minimum of twenty meters to a maximum of thirty-five meters, in nearly every instance the actual shooting handicap is a spread between twenty-two and thirty meters. The exact handicap difference, of course, applies only in handicap events. In handicaps, some shooters are placed twenty-two meters from the traps; others who have won consistently are set back to thirty meters; and other shooters are placed according to their individual handicaps between the two distances.

A second type of competition is called a "series," where two or three distances are shot. Here the lower handicap shooters all shoot from twenty-two or twenty-four meters. The next handicap group shoot from twenty-six or twenty-seven meters, and those with the highest handicaps go to twenty-eight or twenty-nine meters.

The last type of competition is a fixed distance. It is usually twenty-seven meters for such events as the world championships, championships of Europe, and all the most important matches.

As a result of this type of handicapping, and because pigeon shooting in Europe has been done on a large scale and has been popularly accepted over a very long period of time without interruption, there is a great deal of highly technical information to be learned by the American who comes to Europe for the first time. Every good European shooter firmly believes that he must use a different gun, or one gun with two and very often three different sets of barrels, for distances varying by as little as two to three meters. And the guns used, of course, vary widely. The side-by-side is the most popular, although the over-and-under is also used a great deal and an increasing number of shooters are now using the automatics. The citizens of each country, of course, tend to the gun or guns produced in their own country both because of expense of import and because of national feeling, or because they know the aptitude of the national weapon better. So the Italians usually shoot Italian guns, the Spaniards shoot theirs, and the Frenchmen shoot theirs; but there are a great many British Purdy and Boss guns in evidence. Also, a large group of shooters like the German Merkel, particularly before it went back of the Iron Curtain. The Browning also has its many admirers. But here, just as everywhere else in the world, there is a strong difference of opinion as to which is the proper gun to shoot at the proper time.

As a result of the study that has been made of flyer shooting in Europe by some of the experts and supposed experts, the questions of the proper gun and the proper barrel at each distance are not the only factors getting the attention of the shooter. Ammunition is a matter of equal importance. Theories in this, as in other matters, are carried to extremes. It is the generally held belief that one should never fire at a pigeon until after the gun has been discharged in the air, and that the same shells should be used in this preliminary firing that are going to be used when the pigeon is actually shot at. The reasoning is that the pattern will change from a clean gun to a barrel which has had a residue left in it. Many also believe that there is a difference in barometric pressure at various shoots which affects results when various types of shells are fired. The consequence is that some shooters use one shell at one club and another shell at another place.

Everyone, of course, believes in a shell with a maximum spread and penetration and smaller shot size at twenty-two meters, as the pattern is more widely open and the pigeon is closer; while the further back, the tighter the pattern should be. Some of the shooters believe in lead shot, others in copper, still others in nickel—and there is only a limit on the amount of shot that can be used, not on type. There is little limit, if any, enforced on the amount of powder, and you often hear howitzer-like roarings from the field when some shooters are on the line.

The ballistic studies that have been conducted have resulted in European shell-makers catering to the whims of the various shooters. There are many dealers here who are not primary shell-makers but really custom loaders, as we have them in the United States, who will mix any load of powder and shot desired by any shooter. The magnum, of course, is not allowed, and there are certain limits that are placed; but they are not too evident to the American visitor. The 12 gauge gun is always shot and the few ladies who use 16 or 20 gauges (and they are the exceptions) are allowed to advance one meter or even two meters ahead of their handicap distance, to compensate for this lack of power.

The one thing that is usually a little distressing to the American is the system of "miss and out" which is used in every European country. If there are a hundred competitors at a shoot, number one steps up to the platform when his name is called and fires at his bird. If he kills, he then sits down and waits until the next ninety-nine shooters have shot. If he misses, he can go home or sit with the bettors, play cards, go to the restaurant, or do whatever he chooses. For Americans who are accustomed to get up on the line and shoot five birds and, regardless of results, always be allowed to shoot to at least twenty or twenty-five birds,

this at first is a little trying. But gradually this feeling changes, for there is an excitement about this which is like a shoot-off at targets in the United States. Each time you get up to shoot at a bird, there is pressure connected with it. You know if you miss you are through for that day, or at least until the pool or added event is shot at the end.

As a result of this miss and out system, the money prizes are usually much larger than those that are possible in the United States, where the prizes are split somewhat differently. In France, for example, the shooting usually is narrowed down until there are only four left and the last four split the top four purses. In Spain, on the other hand, if there are twelve prizes established, the shooters when they have come down to about eighteen usually have a meeting and decide that they will add six extra prizes, taking a certain amount from those that have already been set. In this way there is a little insurance for all of those who get through that far. They have a chance to get back their entry money, their bird money, and their shell money. Then, when the field is down to six or seven, those left have another caucus and again sweeten the amount allocated by program to the lower places.

In Italy there usually are a few prizes taken from the top money purses and added to the total called for. If, for example, there are ten money prizes and after eight birds have been killed, fourteen shooters remain—four prizes are taken out of the ten specified and added. But the top money prizes are not usually split as they are in France and Spain.

Despite the presence of this prize money, it is very difficult to come out even close to breaking even by following the pigeon circuit. In France and Italy, each pigeon costs between a dollar and a half and a dollar seventy-five cents. In Spain, which is the source of all the best tournament pigeons, they vary from forty to seventy-five cents each. The entries for the shoots are high in every country, averaging well over twenty dollars a day. Shells, even the national shells of each country on which no duty is paid, cost between ten and fifteen cents each. Add to these costs that of traveling and even minimum living expenses, and only a few excellent shooters can make a living from prize winnings. They are the exceptions. For the most part, the European pigeon shooting fraternity is composed of people who enjoy shooting. Although there is a hard core of a few top experts who travel from country to country, the shoots in each country are supported by the nationals of that country. Then in the World Championship, European Championships, and at Monte Carlo, the various top shooters of each country meet and fight for supremacy.

The United States shooters who have come to Europe have, for the most part, given a fine account of themselves. Over the last years, many of our top guns have done extremely well. The result has been, when a new shooter from the States appears, he is usually handicapped fairly heavily. But this also holds true for new shooters from any country, unless their known ability is low—as in the case of wives of shooters who pay either half or no entry unless they win. The attitude of the Europeans is generally very fair but can be easily misunderstood by us because of the language barrier. Just as we often don't understand them, they often cannot understand us. They believe it is polite to shake hands at each meeting, to use the fork in the left hand, to tip the hat to another man. None of these customs exist in our own code of good manners—but that doesn't make one right nor the other wrong. So it is in shooting pigeons—if the guest behaves as a guest, the host behaves as a host and both have an enjoyable time. When one criticizes the other and attempts to belittle him, friction must follow.

So if you plan on coming to Europe to shoot pigeons, there are several points to remember. First, do not expect to find a gold mine—nor even a silver mine. Second, when in Paris, remember that it is in France, not in the United States. Third, politeness begets politeness. And fourth—the same percentage of good to bad people prevails the world over, and that includes pigeon shooters. ■

KEITH ON BIG BULLETS

(*Continued from page* 18)

with a brain shot through the end of the nose from another rifle. Then I learned of two fatal accidents caused by the Ross shedding its bolt into the shooters face and I promptly sold that Canadian rifle.

The .256 Newton, was a splendid long range rifle for deer, coyotes, and similar game, and I also killed elk with it with neck shots. But the meat destruction was terrific. The bullet simply went in until it hit a bone, then blew up. I soon found that, in thick brush, either the .256 or the .280 Ross bullets would blow up on the brush and spatter the animal with fragments.

The .30-06 with 220 grain bullet was a far better elk cartridge, but even this let me down in 1917 when I tried a raking shot, all that I could get on a big bull at daylight. Range was about 60 yards and I put that 220 grain slug in as close to a tree bole as I dared. It raked a hip and went on into the paunch, missing all bones. That was on the West Gallatin, and the bull went into Yellowstone Park, which was patrolled by soldiers. I let one soldier go by while I hid behind a tree. He looked at the tracks, but went on down the trail. Then I tightened up my belt and made a big circle around the elk, and gave him my scent and ran him back out of the park just in time to see the next soldier load his Springfield, strap on his snowshoes, and take my trail into the Park. I followed the wounded bull around Lightning mountain and finally killed him with a neck shot as he threw his head up and charged me. After this and a few similar experiences, I went back to my old Sharps single shot rifles for elk hunting.

The faster you drive any given bullet, the more it expands on impact, and the less the penetration. It will create awful wounds but often fails miserably to get into the vital organs. Over the years, I saw a great many elk shot with the '06 and all manner of loads, and my old sixgun has accounted for a goodly number of .30-06 cripples that I followed up and shot in the head.

Dr. Salley of Warsaw, Mo., shot a six-point bull elk square in the forehead at close range with the .30-06 180 grain load. It knocked the bull down, but he soon regained his feet and ran. The Doctor planted the next bullet in the heart. Examination proved that the 180 grain bullet had blown up in the front portion of the skull after getting through the hide and frontal plate. It had never penetrated back to the brain pan.

In 1925, Frank Kahrs of Remington gave me an armful of their new 110 grain .30-06 loads with a 110 grain open point bullet at 3500 feet velocity. I tried them on coyotes, blue cranes, and other pests. When they landed on a crane, the bird simply disintegrated into a geyser of feathers, legs, and wings. On coyotes, the destruction was terrific. I shot one in the side of the head, running, and the bullet never even went through the head; but every bone in the skull was shattered. I used the load a lot that winter in a Sporter Springfield as a saddle gun for coyotes, and if I could get within 200 yards of a sage wolf and he had another 200 yards to go, I would nearly always get him, shooting rapid fire from a sitting position.

I next tried the load on a big mule buck at around 100 to 125 yards. The 110 grain

slug took him square in the flat of the shoulder and I saw a big cloud of hair fly as the buck jumped and went around the side of the mountain. He stopped again across a small draw at 250 yards, and this time I hit him in the heart, blowing it to shreds. But examination proved that the first shot had penetrated not over an inch, blowing out a crater of meat and hair and hide and leaving the shoulder blade exposed

A magnificent trophy killed by Keith at long range with .300 H&H Magnum.

but not breaking the bone. Though I saw 110 grain bullets used on big game after that, but I never again used them myself.

About this time, the .270 caliber was all the rage. One fall while guiding, I saw four bull elk each take a shoulder hit from the 130 grain .270 bullets, each breaking the shoulder but not even getting into the chest.

One fall, Charley Snook guided five Californians, each armed with a .270, down on Moose creek in the cedar forest, where visibility is none too good and the trees so huge (many of them from ten to fifteen feet in diameter) that shots are nearly all at close range. Those five hunters each hit and knocked elk down, some of them as many as three each; but they came home empty handed. Snook told them to stop and see me and get my recommendation for an elk rifle before they came back another year. They did so, and I told them to get .375 Magnums and use 300 grain soft nose bullets. The next year they all came out happy, each with an elk and each elk killed with a single shot.

In 1927, I watched George Bates empty a .300 Magnum with 180 grain open point boattail bullets into a sow grizzly at reasonably close range. The big bear took them all before going down, and was very mad. She never did locate us or I would have seen a good foot race. Bates' sixth shot put her down with a broken back, but Jim Ross made him shoot her again for safety.

I once watched an old mountain goat take six 130 grain .270s, the first shot broadside behind the shoulder, the next five in the seat of his pants as he ran straight away from us. He then took a 180 grain '06 from another rifle, stopped, looked us over for a time, and decided to commit suicide by jumping into space and onto slide rock a quarter-mile below.

Another time, in 1939, I watched H. Nelson Busick empty his .30-06 with 225 grain ammunition into a small sow grizzly in Alaska. Busick is a good shot, but she would get up after each hit. She finally located us and charged. Nelson's last shot stopped her, but entirely too close for comfort. Those 225 grain bullets, instead of blowing up with *insufficient* penetration as so many light bullets do, had gone clear through the bear without doing enough damage to anchor her. They worked well on larger bear, but were no good for blacks or small grizzly.

I could write another 20 pages of personal eye-witness accounts of failures of small bore, high velocity rifles on American big game. I have also seen many phenomenal kills from the same calibers when the bullets expanded properly, were placed right, or when they struck brain or spine. The .300 H & H Magnum, the .285 O.K.H., and similar rifles, with not less than 180 grain bullets, are very deadly on game up to around 350 pounds weight, will also kill the larger stuff when perfectly placed if all goes well with bullet expansion. But they will also give many miserable failures if they do not hit just right; and at extreme range, when velocity has dropped off until the small bore bullet do not expand, they are all done as killers unless brain or spine is shattered. I do not recommend the 300 magnum for game heavier than about 400 pounds weight.

In comparison, rifles of heavier caliber and with heavier bullets have shown a marked superiority in killing power on all game over the years. Rifles from .333 up to .40 caliber have proven by far the best for all our heavier game, and will not damage as much meat of a small deer as will a small bore, high velocity bullet that explodes on impact.

When we turn to heavier game such as moose, elk, big bear, bison, or walrus, much heavier calibers and heavier bullets are needed for sure, deep penetration. I watched H. Nelson Busick shoot a big grizzly at about 30 yards range with my old .333 O.K.H. and a 300 grain steel jacketed Kynoch bullet backed by 60 grains of 4350. The slug struck square in the shoulder as he stood broadside in a small salmon stream.

At the shot, his front legs simply flopped out sideways and he came down in the stream on his nose. All he ever did was wiggle his ears. That 300 grain bullet had torn an entrance hole almost an inch in diameter, as it had started to expand on his heavy wet pelt. It had then smashed a two-inch wound channel through the heavy shoulder bone, removed the aorta from the heart, and lodged, perfectly expanded, in the right or off lung.

A big Alaskan brownie of the record class took two 250 grain thin-jacket 250 grain .333 O.K.H. slugs broadside in the shoulder and chest area, and both simply blew up under the skin. Then one of the 300 grain steel jacketed Kynoch slugs broke a shoulder, went on through the heart and brought the big bear down for keeps. Even the big bore rifles, when used with fragile, thinly jacketed bullets speeded up to 2600 to 2700 feet, may blow up their bullets and cause only surface wounds. The bullet must be heavy enough and jacketed heavily enough for the job. Even a 35 Whelen can blow up its bullets on heavy game.

On the other hand, I used a 400 Whelen for years on elk, still have it in perfect condition, and have yet to see a better or more reliable elk rifle. It never lost an elk for me in the 12 I shot at with it. No elk ever went over 100 yards after taking a body hit from that rifle with 350 grain W.T.C.CO. bullets and 63 grains of Dupont 17½. I also killed a lot of mule deer with that rifle and it damaged far less meat when properly placed than a .270 or '06 with 150 grain bullets.

Walrus are probably the heaviest game on this continent, and only head shots for the brain should be used on them. A frontal brain shot would be next to impossible even

on a cow, as the bullet would have to go through over a foot of bone. The only really good shot on a walrus is a side brain shot directed to center the extreme rear end of the skull. Walrus in the Pacific may now be killed on license, provided that the meat and hides are given to the Eskimos. Steel jacketed solids are best for such shooting.

I consider buffalo the toughest game on this continent. A huge old bull will weigh 2500 pounds or more and reacts less to a bullet than any bear. I have killed two record bison, and I'm probably one of the few men now living who has killed a buffalo with the .45-120-550 Sharps. It did a good job. My first shot on the charging bull broke the left shoulder and stopped him, but that huge shoulder bone, some 4" in diameter, also stopped the big 566 grain paper-patched .45 caliber slug. The next two both went through the heart and lodged under the skin on the off side. Even then he stayed on his feet a good ten minutes after the first shot.

The second bull I killed with the .476 Westley Richards with 520 grain solids. He took the first one broadside in the lungs at 60 yards and all the effect it had was make him jump, swing around toward us, and come full charge. That slug cut a rib and then turned back into the paunch, where it stopped and was never recovered. The next shot, I tried for the left shoulder but missed the bone by a quarter inch, the 520 grain solid carrying back until it hit a rib six inches under the spine, when it turned square across the body, cutting another rib and lodging under the skin on the off side perfectly mushroomed and with one side of the jacket torn completely away. This shot brought him down in a ground-jarring thump some 30 yards away. Ten minutes later, when Iver Henrikson ran in and kinked his tail, he exploded off the ground and whirled to get at Iver. I broke his neck with another 520 grain solid as he came around and dropped him again. This slug went clear through the neck behind the skull, killing him instantly. I believe only solid bullets should be used against big bison bulls, and preferably from heavy caliber guns.

The foregoing instances and literally scores of others taken at random from my lifetime experience on American game should give the reader a clear idea of why I prefer long, heavy bullets in all calibers and why, for our heavy game and for an all around rifle to be used on all American game, I want nothing smaller than a .33 caliber nor less than a 250 grain bullet. In fact, I much prefer a 300 grain slug for all the larger species; and for big bear, bison, and like animals, a .40 caliber with 400 grain slug is even better.

For an all around rifle, the .333 O.K.H. with 250 and 300 grain bullets, or the .35 Whelen with same weight bullets, or the .400 Whelen with 350 grain bullets, or the .375 Magnum with 300 to 350 grain slugs, are all excellent for everything from deer to the largest American game animals. The various .40 and .45 caliber loads are not too big for elk, moose, really big grizzly or brownies, or polar bear, walrus and bison. The .400 Whelen, .405 Winchester, and .404 Magnum are all excellent on our heavier game, and some use the .450 Alaskan and .458 Winchester with excellent results.

I never did believe in sending a boy to do a man's work, nor in driving railroad spikes with a tack hammer. Similarly, when hunting big game I believe in using a rifle whose caliber and bullet weight is adequate for clean, one shot kills.

When this is published I expect to be hunting in Africa. I plan to take my .333 O.K.H. Mauser, barreled and chambered by O'Neil and stocked by Iver Henrikson, and my .476 Westley Richards double ejector. I will be equipped with plenty of 300 grain bullets, soft nose and solids, for the .333 O.K.H., and plenty of 520 grain solids for the Westley, with some soft nose for lion. These two rifles will, I believe, take care of my requirements, as I want to spend all available time on the big stuff while in Africa. The .333 O.K.H. with 250 grain bullets for light antelope at long range, and 300 grain bullets for the heavier antelope or standing shots at lion or crocs or hippo, should do nicely; and the big double is still, in my opinion, the best tool for dangerous heavy game. Of all the British Express cartridges I prefer the 3" .476 with 520 gr. slug.

Big game should never be shot over 300 yards if it is possible to approach closer, and the larger the game the closer should the hunter stalk, for certainty in placing that vital first shot. The first shot is worth a dozen fired after the game starts moving.

Big bore heavy-bullet rifles are still lethal as far as you can hit a beast, for they cut a big entrance hole and go deep. A small bore, light, high-velocity missile is effective only so long as velocity is high enough for certain expansion, and then only providing the bullet does not blow up too soon. A cartridge large enough for certain results on our larger game is bound to be a bit strenuous on a 150 pound deer, yet you can shoot a small deer with a 300 grain .375 Magnum or .333 O.K.H. 300 grain bullet, or with a .405 Winchester, and eat said deer right up to the bullet hole; whereas you may have a quarter to a half of the animal all bloodshot if a .243, .270, or .300 Magnum is used.

Each type cartridge has its own proper place in the hunting field. While the small bore, high velocity rifles are best for open, long range, plains shooting of light game, only the medium to big bores will give uniform certain results on all species. This is my creed, based on my experience. And, as the feller said, "I'll stick with it until I'm stuck by it."

A GUN NUT'S TOUR OF EUROPE

(*Continued from page 36*)

couple of the P-H sub-caliber insert barrels to change a 12-gauge to a rifle.

We bought a few guns which they had put out with prices, but Edwards made a slight mistake: in trying to speed things up for us, he wrote ahead to J. B. LeBreton, sales manager of Parker-Hale, asking that "interesting American guns" be put out for us to see. They did too good a job and displayed them complete with American prices! To travel thousands of miles to find Colt derringers at $50 to $100 was not fun, but we found some guns in the Midland Gun Co., an ancient firm recently bought out by Parker-Hale. John Scandrett, general Parker-Hale export manager, took us over to what appeared to be bombed buildings, where in sheds we found chests of Colt .45 revolvers. I bought a pocket automatic for a few shillings but Whittington, who likes modern guns and competition shooting, bought a half dozen interesting early Colt automatics. Forgett and Edwards really waded into the piles of pistols, and found a few really choice ones which had not been tagged by Chapel's latest high prices. Certainly digging around in Parker-Hale's basement was a high point of the trip.

Stella and I did not go to the Wallis & Wallis gun auction sale the following day, but Forgett, Oberfell, Demming, and Edwards drove down to Lewes, in southern England, to the auction. About 400 guns were on the block. Oberfell wanted to buy a Scottish pistol for a friend back home, but he said the three Scottish pistols at the sale were poor specimens that went for fantastic prices. Generally, the prices were high because British law curbs owning modern guns. Premium is on old guns — dueling pistols, muzzle loading rifles and the like—which can be legally owned without all of Scotland Yard's red tape.

Stella and I were excited at the prospect of flying to Belgium next day. But we didn't stay long: just time enough to get onto a small Chevrolet bus that carried us through Europe on the Gun Tour. Our driver, Raymond Lambotte, was a genial Belgian who didn't speak any English. That was okay—neither Stella nor myself spoke any French. For languages we relied on Bill Edwards' French, George Whittington's German, and the fact that most everybody we met spoke some English and wanted to be friendly. Being friends is possible without knowing languages, we found out. We drove all day to Paris.

Main attractions in Paris for gun people, we found, were three: gun shops; the "Flea Market" to the north of town; and the magnificent, breathtaking displays in the huge old Hotel des Invalides. Originally a rest home for the soldiers of Napoleon, the Invalides is now a huge military museum. Connected to it is the mausoleum, the tomb of Napoleon Bonaparte. Maybe some of my ancestors were French—standing at the balcony overlooking the huge carved red marble coffin of the great Emperor, I felt the reverence with which his name is still held in France. His guns, personal relics and those made by his order and presented to his marshals and generals are preserved in the Invalides.

A colonel from the U.S. Embassy in Paris had arranged for us to go through the museum, some parts of which were closed to the public. The conservateur of the Museum of the Army escorted us through vast halls lined with hundreds of muskets and carbines. There was in this one museum a greater collection of exquisitely turned out Boutet duelling pistols than I ever knew existed; fine flintlock weapons encrusted with gold for generals and marshals, and with silver for lesser officers. One room contained hundreds of tiny figures, about 10" high, uniformed in miniature equipment, swords, muskets, cutlasses, of French soldiers of all ages. All too soon the visit to the Museum of the Army was over.

Later we visited the "Flea Market." You can buy everything from fine Cloisonne vases to Louis XVI furniture there. Grown up in a rambling back-alley fashion near the Porte de Clignancourt, north of Paris, this huge open-air market—Marché au Puce—contains a subsection to the west known as "Marche Biron." Gun sellers' prices were high—all had Bob Abels' latest catalog and were in tune with the New York prices—but there were some fine things shown. One man offered a Bird & Co., Philadelphia, percussion Kentucky rifle—Lord knows where he had got it. Maybe some touring French nobleman a century ago had picked it up as a curious specimen of American workmanship and now, at last, it was being offered to American tourists in France, to be taken home again. The asking price was about $200—high for a percussion Kentucky, but it was in fine

condition. But it was outrageous, of course, if one thinks of the value that was in French francs: 80,000 francs, or three months' wages for a working person.

Next stop beyond Paris was Saint Etienne, the gunmaking center of France. We spent a very pleasant morning at the factory of Monsieur Darne. The gun he makes is an unusual sliding breech design. It is very strong and has unusual camming power on closing. French shooters in the tropics have trouble with swollen paper shells. The Darne breech would solidly seat them, as Monsieur Darne showed us, vividly: by stepping heavily on a shotshell until the brass was flattened, then placing it in line with a chamber and slamming the breech lever closed. The gun closed perfectly, and the brass base was full-length resized.

The afternoon was spent in a visit to the public museum where we saw more examples of fine craftsmanship, plus an unusually large assortment of the standard American percussion revolvers, all in fine condition. We then went to visit the research museum at the French government arsenal, where rifles, machine guns, muskets, and small arms have been made for the Army for many centuries. We were surprised to find that St. Etienne, then in production on the new gas-operated semi-automatic military rifle, also made arms for commercial sale. At the end of the war they made boxlock shotguns. At the time of our visit, they were considering making the military automatic rifle as a sporter. In the museum itself were many guns, including many cut away for demonstration. The museum displays were very well thought out and attractively organized, and the exhibits are used to instruct school children as well as boys of the gunsmith school for the trade.

As we left the museum, I noticed that a six foot wide French eagle, which I had thought was carved from wood, was really made of parts of arms. The feathers were bayonet blades, the small feathers: locks and hammers. Every part of a musket went into this incredible fantasy bird in steel.

After a long drive we came to our hotel in Nice, on the French Riviera. There we relaxed from a fast schedule. We spent time on the beach, and visited Monte Carlo. Forgett, saying he was unlucky in love but lucky at gambling, won 5,000 francs with four straight passes. He kept the 5,000 franc note—worth about $14—and framed it as a souvenir. We also went to the palace. Edwards and our English-speaking guide got as far as Princess Grace's personal secretary, trying to get us in to see the palace collection of arms. Maybe another time. . . .

From Nice the next hop was to Brescia in Northern Italy, where the old and famous firm of Pietro Beretta is located. There were plenty of surprises to the visit to Beretta. Stella was impressed by the cleanliness of the entire shop. There was plenty of activity, for the various machine shops were running full blast making pistols for Egypt and Israel, Garand rifles for Denmark, and the commercial Berettas. But the red tile floors were swept clean, not a drop of oil on them, and while plenty of coolant was being used by the machinists, nearly every man we saw wore a collared shirt and tie. Shoes, too, were not scuffed and worn, but polished and new. These men were as they usually appeared, shined up and neat. They were not cleaned up in anticipation of our visit, for through some mix-up in Edwards' letters we were not expected until the following week.

A young Venetian, Luciano Amadi, conducted us around the plant. He brought out a cutaway Beretta 9 mm military automatic, which Demming found interesting since he could see how it worked by watching the parts move.

I was impressed by the high quality of machining, and care which went into the production of the Beretta Garands. The pistols, too, showed this same attention to quality which seems a hallmark of Beretta guns, since about 1680. In their museum, buried in the bottom of a display case, Forgett found some "goodies" to delight him. He likes experimental guns, and discovering pistols which resembled the Italian military automatic, the Glisenti, set him off on a train of wondering what the connection was between Beretta and Glisenti. On short notice, no one at the factory could help us, though great friendliness was shown us at every turn.

Beyond Brescia was a high spot in pleasure of the entire trip, the water-bound republic of Venice. The square of Saint Mark, the church with its inlaid gold glass mosaics, the colonnades along the sides of the squares where orchestras play at dinner in the evening, all made pleasant memories.

And there was gun-interest in Venice, also, though it took some digging to find it. In the armory rooms of the Doge's Palace were hundreds of mass-produced pikes, swords, and suits of armor, from the soldiers of the Venetian Republic three centuries ago. Hanging from the walls were dozens of nearly identical all-steel wheel-lock "dags," pistols with metal stocks that reminded me of the Scottish designs. And displayed in the somber panelled room lighted by the sun falling through stained glass windows, was a Gatling gun, made about 1450!

After visiting the glass works we boated by gondola to the Plaza del Roma, and drove on to Ferlach.

This little town, high in the Austrian Alps, was not far from the Yugoslavia border. We began to wonder if we were really going correctly. To find out at last, we asked a native. His friend, the postman, came forward and listened. Edwards tried his French with an Italian accent, also bad German. Our Belgian driver tried French. Whittington, by popular vote, was pushed forward and spoke in better German to the citizen. Finally we were reassured it was the road to Ferlach. As we drove away a gleam of comprehension came over the face of the postman, who had all the while been watching our Belgian tourist-license bus. "Speak English?" he asked. We learned that every Austrian studies at least one other language in school, usually English!

We got to Ferlach late in the afternoon. But Edwards had written to master engraver Albin Obiltschnig, who had done a shotgun pictured on one GUNS cover. As we drove along the winding cobbled street, we approached a short, burly man, and Edwards said, "Why don't we ask him?" With a broad smile he responded in German but unmistakably, "I am Albin Obiltschnig." For dead reckoning we had done pretty well.

The next morning we toured the workshops. We saw them make a Ferlach gun from the white-hot breech forging up to the finished gun. As a souvenir, Forgett bought a gun frame stamped with proof marks.

The proof director was impressed and

gratified by Forgett's wish. He spun open the lock of a big safe, opened a smaller metal chest with a key; then with the reverence due their importance, took from a pasteboard box the proof stamps of Ferlach. His assistant proof master then stamped the dural frame, carefully, taking care to see that each stamp made a full imprint. Certainly Forgett wound up with a unique curio, the only unfinished gun that ever got out of Ferlach with the proof marks of completion on it.

Next stop, Ulm and Walther, via Munich. In Munich the next day, a Sunday, was spent sightseeing at the Science Museum and the beer hall. Edwards' enthusiasm for cutaway machines got the final touch at the Science museum—they had a full-size cutaway steam railroad locomotive. But it was too big to take home. The next day we drove on to Ulm, which is now the center of German gunmaking since Suhl and Zella-Mehlis are in the Russian eastern zone.

At the new Walther factory in Ulm we were shown about by Herr Wagner, formerly of Merkel in Suhl, now Fritz Walther's export manager. Wagner chatted non-commitally about gunmaking until someone touched him on the subject of Fritz Walther's escape from the Russians. Then Wagner became really upset, angry. The Americans had told Walther to "stay at home" in Zella-Mehlis. "You will be safe; we will come and get you before the Russians arrive." So Walther stayed at home, but the Russians advanced. Walther fled to Switzerland with his drawings. Wagner was incensed at this cavalier treatment of a man who, in spite of his being on "the losing side," nevertheless had earned the respect and esteem of all gun enthusiasts.

The new Walther factory combined rapid efficiency and expansion. We entered by the back door . . . there was no "front door," no building devoted to offices or "show." Buildings for production were being put up first. We watched the new P-38's being turned out for the West German Army as fast as they can be shot by expert pistolman Rau and passed by the inspector. We ordered four pistols at the factory, one for myself, one for Forgett, one each for Whittington and Edwards. The cost in Germany was about $45. Other Walthers included the PP and PPK. The Ulm-Walther pistols are French made under license, but stamped and finished by Walther with the Ulm marks. These pistols are exclusively for sale in Germany while the French guns are for world export. Walther also makes rifles. I watched one lathe operator take a blue chip a quarter of an inch deep off a barrel blank with a carbide bit. Full speed ahead with care was the theme at Walther.

From Germany we went to Neuhausen in Switzerland. There is the Swiss Industrial Gesellschaft, or Company — making everything from 60 per cent of the country's railroad equipment to precise target automatics. Mr. William Hurter, one of the directors, guided us on a brief tour of some of the manufacturing, then showed us final assembly on the SIG pistols, and the testing room. Ranged about the walls were examples of SIG machine weapons, from their latest AM 55 assault rifle, just adopted by the Swiss government, to some of their early experiments, including one rifle with a barrel that blows forward. In examining their guns, I was impressed by the fact that no expense was being spared to fabricate the best pos-

sible item, regardless of design.

By contrast with the mammoth SIG factory, we visited the Hammerli works in nearby Lenzburg the next day. Hammerli makes the Olympia pistol designed by Walther, single shot match pistols, target rifles, and Swiss Model 31 army rifles. SIG, which also makes Swiss rifles, has about 6,000 employees. Hammerli has 125. Because Hammerli is run almost as a custom gun shop, such items as custom-fitted grips to the Walthers or match pistols cost little extra.

Back in Zurich, Stella and I and others of the Gun Tour did some sightseeing. Edwards and Forgett went off to visit the shooting club, the *Schutzengesellschaft der Stadt Zurich*. "Fabulous, huge, big as a railroad station," was their report. Not one but two big buildings occupied the club grounds. The shooting pavilion itself, a completely enclosed stone and brick building big enough for a hotel, had over 30 elaborate firing points for rifles at long range from the second floor, and a number of pistol points for short range from the first floor. The rifle shooters fired over the heads of the pistol shooters, and two matches could be run at one time.

In Switzerland, the shooting clubs are subsidized. The government has a sliding price on ammunition. Cartridges for big shoots between clubs cost about 6¢ per round. But if the match is between competitors in one club, ammunition is only 4¢. And if for practice, the ammo costs even less than half, about 2½¢ a shot. Such a sliding scale of subsidy would put a lot of "fun" back into expensive U.S. big bore practice.

The longest haul of the trip was the drive from Lenzburg up to Liege, which we made in two days, stopping at Nancy. In Liege were two stops—the Fabrique Nationale, where Browning guns are made, and the city museum. First came FN.

We spent a whole day there, in charge of young John Val Browning, grandson of John Moses Browning and chief of Browning gun production. He took us through the making of a Browning shotgun from the raw wood and steel right up to the finished product. FN maintains a constant check on materials. Rooms filled with technicians testing samples was an impressive sight, almost as impressive as stepping out onto the shop floor itself. There, we were back in another age, for overhead shafting drove most of the machines, although electric equipment was being installed in gradual modernization. But these machines chop out of the solid forging every part of the gun down to the trigger. It was almost an emotional experience to view the bins of rough forged parts—trigger housings, shotgun receivers, triggers themselves, with their gray corona of steel flashing, and then realize the multiple steps each one went through to become part of a finished Browning gun.

Director of the Fabrique Nationale, Monsieur Rene Laloux, greeted the Gun Tour late in the afternoon with cocktails in the conference room. Between Forgett and the august director of the Fabrique Nationale it was an odd reunion. When M. Laloux had come to the U.S., he visited Aberdeen Proving Ground where Forgett was stationed as a buck private in the Foreign Materiel Museum. The Belgian arms maker gave Forgett his card, said "If you ever get to Belgium, look me up." This Forgett did, to Laloux' astonishment but evident pleasure. This, from the highest to the lowest person who had anything to do with the gun business abroad, was the uniform response: genuine pleasure and friendliness at seeing us.

The next day we were scheduled to head for Brussels to rejoin our Sabena plane, last leg of the journey homeward. But first we drove out to the museum. Over 8,000 assorted small arms were on display. In one room were such rarities as not one, but two Mauser-Norris guns, built by the Mauser brothers when they were working for the Remington agent, Samuel Norris, in Liege before founding the famous Mauser factory. And Oberfell found one single thing he thought was worth the trip to Europe: a shotgun which had a muzzle choke attachment. Only this was a double-barrel shotgun, and the choke attachment regulated pattern just the way one major modern choke works! But the Liege gun, designed by a gunmaker Robert, was made about 1881. There is nothing new under the sun in the gun world, and the Liege museum proved it.

In Brussels, we expected to do little but look at the fine old buildings, watch preparations for the World's Fair in 1958, and visit the near-by Waterloo battlefield. We saw these: a Springfield M1861 rifle-musket among the "Napoleonic" relics carefully preserved at the battle site. We almost missed the sight which really capped the climax, the Brussels Army Museum. "Oh, that's just an old museum full of guns," our guide told us. "That's exactly what we came to see," we chorused. Dakin, Oberfell, and Demming had gone on ahead on business, but the Whittingtons, Forgett, Stella and I, and Edwards, went to the Army Museum.

It is the world's largest military museum—acre after acre of guns. At floor level are the full size ten-foot glass cases with rifles and uniforms. Above these are panoplies of muskets, carbines, rifles, sabres, in rosettes with helmets, drums, armor. Above these in long lines around the rooms, are helmets with plumes, shakos with pom poms, headgear of all kinds. I had heard of the famous German "Death's Head Hussars." But the Army Museum had fur hats of many different regiments which featured the famous skull-and-crossbones insignia.

Hanging from the ceiling were dozens of World War I airplanes. One long hall was filled with tanks from both wars. The latest equipment of all nations was incorporated in current displays. You could take the Smithsonian collections, West Point, Aberdeen's Foreign Materiel section and a couple more of our most famous collections, and just lose them in one wing of this monster military collection. We had seen the major museums of Europe, we had seen our own famous arms collections—to be astonished by anything more really took something big. This collection was the biggest, but it was complete, interesting, and well arranged.

On that final note, we finished our long, but all too brief trip through Europe with the Gun Tour. It wasn't an easy trip—Stella was often tired by the pace and, while I like things leisurely and take it easy, I wore my feet out keeping up. But with all the strange impressions, the gun shops which had for years only been distant names, the romantic sights of foreign places—with all this, it is too trite to say that "We wouldn't have missed it for anything."

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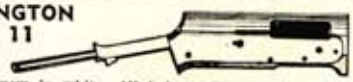

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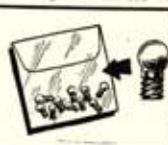

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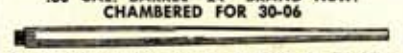

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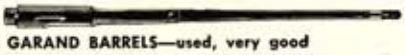

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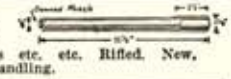

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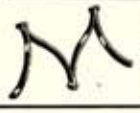

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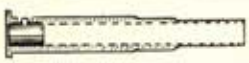

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Now you can shoot 22 cartridges in your .303 British rifle—British issue for training—surprisingly accurate and almost silent when fired in regular rifle barrel OR buy one of our 22 barrel blanks and turn to rifled, removable liner. Similar to U. S. 1922 adapter cartridge but uses S. L. or L. Rifle.

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reduces to 5 shots, only way to make Garand fully legal for hunting in "Five Shot" states, (easily installed & removed). Set, complete with special follower & 2 five shot clips, $3.95. Extra 5 shot clips, 95¢ ea. Standard 8 shot clips, $2.00 per dozen.

GARAND TAKEDOWN
& chamber cleaning tools, fits in trap in butt—new —$1.00 ea., 2—$1.50 ppd.
GARAND HANDGUARDS—set of both, complete with metal, brand new, $2.50.
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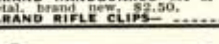

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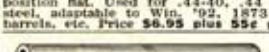
For Springfield and Garand rifles, fits in butt, excl, complete .....$1.00 ppd.

NEW .44 CAL. BARRELS
22" long, straight ⅞" dia.—6 groove. One end turned to ¾" from ⅞" from turned end shallow position flat. Used for .44-40, .44 Spec. Rifle, alloy steel, adaptable to Win. '92, 1873 & others, pistol barrels, etc. Price $6.95 plus 55¢ ppd.



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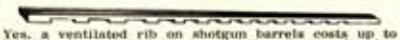
Brand new, straight lengths, 3¼" x 8", for extra long and/or fancy barrels. Supplied chambered for .45 auto or unchambered, state which.....$3.95 ea.—or 2 for $6.50.

Hey! VENTILATED RIBS Should be $35
• Shotguns • Rifles • Pistols



Yes, a ventilated rib on shotgun barrels costs up to $35.00 more for this faster sighting, better shooting "extra"— but we can supply this ready to install rib, fully machined from solid (a full 32½") for only $2.79. Machined grooves on rib make it no glare—mounting posts are pre-tinned for gas stove assembly using regular soft solder. Makes any shotgun, pistol or rifle into a custom deluxe model. In white (try our instant blue—Formula 44-40—3. Full gun size $2.00). Yours at far under production cost—for only $2.79.
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— Just a Few Available —

27" Long, 8 groove, 1 3/16" at breech tapering to .625 at muzzle. Don't ask why, but these super fine barrels were German machine gun BBLS, refinished & lined to .22 Cal, with new Parker Hale liners by B.S.A. chambered to 303/22 British. We cut off useless m.g. end so front ½ of 303 chamber remains which gives chambering start for large c.f. 22's. For .22 r.f., simply cut shorter—less than price of liner alone—a serious .22 BBL. $7.95 plus 60c pp.

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SHOPPING

BOM-KOTE Sports-Goods Spray-Seal is a colorless preservative that seals out moisture and resists corrosion, rust and heat. Applied to golf clubs, shotguns, rifles, pistols, fishing tackle, skis, bicycles, sleds, ice and roller skates, camping equipment, etc., Bom-Kote assures effective protection. It is indispensable for protecting equipment in storage, to keep it like new; will not chip, crack, peel or darken with age; dries to the touch in 15 to 20 minutes; and sets firmly within 3 days. Full details may be obtained from The B.O.M. Company, Dept. G, 210 So. Clinton St., Chicago 6, Ill.

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DOUBLE SHOTGUNS of fine quality from Spain are imported by Dakin Gun Co., Dept. G, 9 Sutter St., San Francisco, Calif., and are available from Dakin franchised dealers throughout the country. Model 215 shown is finely engraved, retails for only $298.50. Company's proprietors have been shotgun enthusiasts for decades, take annual trips to Spain to maintain high quality and

exacting inspection standards. Spanish makers of Dakin guns have one of world's finest sources of gunstock walnut. Like a double? You'll like a Dakin.

CHIEFTAIN MOCCASINS are perfect for comfort, perfect for style. They're made of highest grade leather by Penobscot Indians, will give you years of wear. Made of very heavy 10 ounce thick uppers and arch-supporting rubber soles, they're available in gold or redwood colors. Sizes 5-13, order your regular shoe size. $8.85, postpaid. Corcoran, Inc., Box PG8, Stoughton, Mass.

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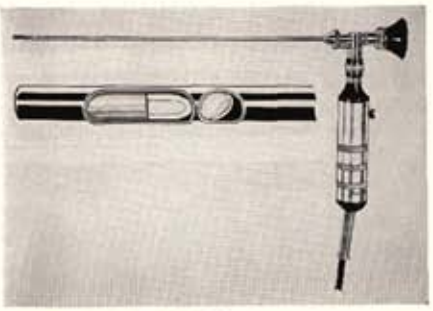
WITH Guns

watering goodness of country-smoked meats. Try it at home with "city meats," too. Used in kitchen with normal ventilator or exhaust fan, only a small wisp of smoke emitted during operation; no danger of scorching meats or fire since there is never any flame in smokehouse. At all good stores, or write Hickory Hill, Inc., 221 N. LaSalle St., Chicago, Ill., for name of store nearest you selling smokehouse.

CACTUS KID .22 side rod ejector revolver is basic I-J with hooded front anti-splash cylinder, fitted with improved side ejector and distributed by Buddies Arms Co., Dept. G, 2226 East Lancaster, Fort Worth 3, Texas. Modification makes "Cactus Kid" faster to unload, easier to handle. Adjustable coil mainspring, weight only 25½ ounces with 4½" barrel, nice for pocket or holster. Available also with 6" barrel, 8-shot cylinder, shoots all .22 rimfire cartridges. Also available as Cactus Kid Target Model with adjustable sights. Standard is $35.95; Target model with "Micro" sights, frontier loading gate, $39.95.



EDER BORE SCOPE is answer to a gun crank's—or an ordnanceman's—prayer. At GUNS we wanted to photograph the inside of a .22/250 barrel but even Springfield Armory didn't have equipment to make the picture. Then right here in Chicago we discovered an instrument maker, Eder Instrument Co., Dept. G, 2293 N. Clybourn Ave., Chicago 14, Ill. who makes a magnifying inspection device for tubes over ⅛" diameter. A lens bulb shoots a concentrated beam of light into a hole too small to insert a light probe, and ⅛" diameter mirror is available for side viewing on holes from .125" up. Adaptors to .500" size for shotgun bores. 5X scope end adjusts from 3" to infinity. Battery or transformer powered, light, compact, indispensable. Gunsmiths can't do without a set; gun cranks will have to get one, too. Examine exact condition of your pet bench rifle bore; check used guns for rifling throat wear before buying. Prices from $56.45. Write for descriptive folder.

SHOTGUN CLEANING is quick and easy with the new "Double W" cleaning rod. The specially designed rod, covered with soft deep pile fabric of Dynel takes out harmful, abrasive grime without scratching the polished bore. A smaller oiling "bob" of Dynel is then attached to run through after cleaning to ward off rust. The whole job takes about one minute. Available from W & W Manufacturing Company, Grandview, Missouri. Price: $3.95.

FAULK'S DUCK CALLS have made up a special gift set of calls, a matched set in myrtle wood, including a Duck call, a Goose call and a Crow call. All are made and finished with extra care, put in a gold foil box lined with southern cotton. It is the sort of gift most any man would be pleased and proud to have. It is different too. So far as we can discover, there is nothing on the market like this—a matched set of extra select wood, Championship calls. This one sells for $12.50 postpaid, Faulk's Duck Calls, 616—18th St., Lake Charles, La.

NEUMANN MAGNUM TEN is powerful, strongly made double goose gun by famous century-old Belgian firm. Crafted in Liege, heart of gunmaking for 500 years, Neumann 10 gauge combines highest refinements of the gunmakers' art with modest engraving, good stock wood, at fair prices. Barrels 32" full and full, 3½" chambers, auto or non-ejector, time-tried Anson & Deeley system action which makes for solid receiver strength as water table is not weakened by side lock plate cutouts. Weight about 11 pounds. From Silver & Co., 815 Mission St., San Francisco 3, California.

FISHER TOP-LOADING melting furnace will heat seven to eight pounds of lead in 20 minutes and, by keeping lead going into the pot, can be used to supply six- or eight-cavity gang molds continuously. Pot is light alloy, attractive sandblast finish, copper finish legs. Has built-in heat control and Chromalox Sealed Heat Element. Fisher lead melting pot sells for only $14.95 retail at dealers. If your dealer cannot supply you, write to Fisher, P.O. Box 1974-G, Jacksonville, Florida, enclosing money order.

NORMA AMMO is good stuff. Tried out some of their special 7.7 Jap the other day in one of the AAWA's light Type 99 bipod machine guns, and all shots fired without trouble, with no signs of stress to the cases. Gas operated machine guns are more damaging to brass than recoil operated guns, but the Norma stuff shot well. Good for Arisaka rifles, too, and comes in hunting bullet types to suit most N. American big game. Dealers buy the stuff in batches so the guys who shoot Jap guns must like it. Norma unformed brass available for the handloader, and some very accurate 9 mm loads put up for P-38, Lugers, Browning Hi-Powers, and others. At many dealers, slightly less than other brands, reloadable.

MARBLE RODS for cleaning in all calibers, jointed for easy packing to be ever ready when needed after a day's shooting. Marble rods have deep threaded tips to give strong union between elements of three-piece types. Free-wheeling handles rotate with rifling.

CIVIL WAR GUNS BLAZE AGAIN

(*Continued from page 30*)

the men of the North-South Skirmish outfits have found close touch with the meanings of our country, through that study of history which emphasis on realism demands.

Arms must be types used by North or South. Most used is the muzzle-loading .58 caliber Springfield rifle-musket, Model 1861. Either Springfields or the identical contract rifles are shot in matches. Demand for shooting-condition arms has pushed up "minny musket" prices. Highly prized are the blue and brass-trimmed Remington Zouave muskets. Resembling Model 1841 "Yaeger" rifles, these Remingtons were made in 1861-62. Improvements included barrels thicker than '41s, bored to .58". Also popular and cheaper are British Enfield rifles. Many were made by firms such as the London Armoury Company for the Hon. Caleb Huse, Confederate arms purchasing agent to Europe. Few Confederate-association Enfields are known. Most were either burned as scrap by the U.S. or re-exported by arms dealers after the war. Enfields used for shooting now are often weapons recently re-imported from England, old British war surplus. A few lucky shooters use genuine Confederate-made rifles, Springfield-type guns made in Richmond or Southern copies of the Enfields.

Skirmish rules say only original or accurate replica material may be used. But gone are the days when dealers offered cases of Springfields all in grease. Broken guns can be repaired, but rusted barrels cannot be replaced. The cost of making replica Springfield .58 barrels, it was found, would be too high for estimated sales. Meanwhile, shootable Springfields get fewer and fewer. Excellent-condition collectors' specimens are seldom risked in the rough camp life of a modern Skirmish contest. Shortage of rifles stimulated the Carbine Matches. Civil War cavalry carbines can be used. A shooter whose rifle-musket may not be in top shape can still compete if he can find a Sharps or Gallagher or one of the fifteen or more carbines bought in fair quantity in the war. Handguns are also used in matches. Holster makers offer replica Civil War belt scabbards for Colt and Remington revolvers: black for Yanks, russet for Rebs.

Replica leather and uniforms can be handmade, as in the old days, but guns must be found. A virtually untapped source of authentic shootable guns still exists for Civil War and Skirmish fans. These are the foreign rifles, imported by both sides from '61 to '65.

First of course is the Enfield, a regulation Confederate arm; the long, three-band rifle-musket, caliber .577. A few for New York State were originally bored .58. Two qualities were made, "No. 1" and "No. 2." Differences were the degree of interchangeability of parts. Most machine-made No. 1 guns had walnut stocks while the No. 2 handmade guns, being cheaper, often had beech stocks stained like walnut. Caleb Huse reported that he contracted for the total output of the London Armoury. This seems to be so. Kerr revolvers marked L.A.C. were issued to the Black Horse Troop, famous Southern cavalry (though the Black Horse riders had bays, sorrels, dapple grays, or any color horse they could find). Enfields were shipped to Wilmington, N. Car., via blockade runners. C.S.A. Navy Secretary Mallory suggested to Huse that he ship the rifles unstocked. The shorter packing cases could be disguised as "machinery."

Among the other .58-caliber arms are good weapons which give the knowing shooter a chance to pick up a bargain. Most common is the Model 1854 Lorenz rifle, known to Civil War soldiers as "the Austrian Enfield." The locks of these resemble the Enfield, not cut for the nipple bolster as in U.S. Springfields.

Two basic models of Lorenz exist: the short Jaeger rifle and the standard military three-band rifle-musket. Just 29,850 of the Jaegers were imported, and the arm is an official U.S. substitute standard, illustrated in the Official Records, War of the Rebellion, Union & Confederate Armies. The Yaeger's barrel is a shade under 25" long, full octagon except for about six inches at the muzzle which is turned round for the long, single-edge socket bayonet. The infantry rifle has a 37" round barrel; is fitted for the ordinary socket bayonet. The Union brought in 226,294 of these "Austrian rifles." Originally in .54" caliber, many were bored out in Austria for the U.S. .58 bullet.

Four kinds of sights are found on these guns. Non-coms, skirmishers of the Jaeger battalions, and the best infantry marksmen, received Jaeger carbines with sights graduated to 1000 yards. These guns have a peg inside the breech to prevent ramming the bullet too tightly on the powder; the peg is called a "tige." Plain Jaegers were sighted to 770 yards. The rifle-musket has no tige. Sights for regular Lorenz infantry muskets are graduated to 245 yards; those of "third rank" men, file closers, and skirmishers, are sighted to 820 yards. Original load for carbines and rifles was a flat-base .54 caliber sugar-loaf bullet, two grease grooves, 450 grains, propelled by 61 grains of powder. Bored-out arms used the .58 standard U.S. load.

French and Belgian arms were basically the French Model 1846 "Carabine à tige," or rifle with peg breech. These two-band rifles were made to exacting specifications in French government arsenals and less exacting specifications in Liege, Belgium, gunsmith shops. Light and heavy models were made, the heavy being caliber .71"; the "light" and more graceful arms, caliber .577". Distinguishing lock design of both types is the back-action lock plate held by round screw heads drilled for a split screw driver. A heavy curved-blade bayonet, known to the French correctly as "yataghan" after the Turkish sword, and to American gun fans incorrectly as "saber" blade style, was issued.

Sub-types of the French-Belgian pattern exist. The .577s for the "Voltigeurs," light infantry and sharpshooters, have long-range leaf rear sights. But those for regular infantry have sights fixed for a point-blank range of about 225 yards. By decree of 1857, all line infantry rifles were reduced to the short, convenient length of the Voltigeurs' "carabine," and fixed sights put on. Placing the thumb across the barrel and sighting over the nail gave higher elevation. Voltigeurs' rifles with elevating sights are preferred for shooting, though most Skirmish contests are at less than 100 yards. At the beginning of the War, uniforms and equipments for 10,000 of the crack French regiment "Chasseurs de

Vincennes" were imported. Their "carabines," the model with tige, were probably issued at the beginning of the war, later withdrawn as the natty Chasseurs' zouave uniforms gave way to more sensible blues and fatigues. Most of the assorted European arms were withdrawn from service by 1863 when sufficient Springfields were being made.

Most elusive rifle for Skirmishers to seek out is one which survives in a single specimen, listed as "Rifled muskets, Springfield model, *German* . . . Cal. 58." One gun, interchangeable with the Springfield but marked "8" on all parts and "SUHL" on the barrel, is at West Point. How many were made, by whom, why, and where they are today, remains a mystery. Perhaps in some middle-European warehouse, unopened since the last century, are these remaining rifle muskets. Stranger things than this have been commonplace in the gun game, and certainly the Skirmish enthusiasts would not complain.

The Skirmishers have made a step forward, ballistically. They invented the first new "minny ball" in a hundred years. The original Springfield bullet was deeply grooved. The Enfield used a smooth-surface bullet with either a plugged base, or "Pritchett," with concave base. To improve accuracy and provide a standard ball for all guns, the Skirmishers developed a new bullet, a little longer and with the center of gravity further forward. But something zestful has been taken out of the matches—the new ball no longer whines and zips with that old "minny" z-z-z-z-ing!

Replacing the historic picture of brother or cousin across rifle sights is a new set of targets. Easily visible, for spectator appeal, are gaily colored balloons, tethered at 50 or 100 yards. A bullet just creasing a balloon will burst it from friction, but there are Skirmishers who swear they bounced the balloon and didn't break it. Bright yellow clay birds are good targets; hits are easily seen. For medal-winning competition, paper bullseyes are used. But the contest that gets most attention and offers greatest challenge is the stake shoot. It's realistic, and it takes team work. The two-by-sixes set in the ground are excellent combat marks.

Historically, the match recalls such blazing fights as that at Shiloh, when Confederates faced Yankees in rifle broadsides. Whole trees were chopped down by musketry, and the modern stake shoot recreates those moments. Eight-man teams are usual, but any number can shoot so long as the teams are even. First team to chop down its stake wins.

Feverishly ramming torn cartridges, the blue and gray-clad marksmen labor in a continuous swirl of acrid white smoke and flashing muskets. Suddenly the target butts fade away, the distant shimmer of Lake Erie dissolves into a black mass of trees from which cough the screaming rounds of grape shot, bursting on the ricochet before your lines, sending their song of death through the ranks. The white paling 50 yards off becomes the frontal silhouette of a charging officer on horseback, and from the ridge of shadows which moments before were rifle targets, a line of men disengages from the woods and with a chilling yell borne above the snarl of bouncing Minié bullets, moves forward on a run, bayonets gleaming. Suddenly a shout is raised and the Skirmish shooter snaps back to the present; the visitors behind the lines at Perry are cheering—his team has cut the stake first. Part of the attraction this Civil War reenactment has is its taste of imagined danger—danger borrowed from the past.

Scientifically, the Skirmish has its appeal, too. As an eye-opener for the cynic who scoffs at "them quaint old minny muskets," teams of Skirmishers pit their skill against men armed with Garands. They have frequently done so, and consistently won. At Greenfield Village's annual turkey shoot last October, the Port Huron Rangers' first team championed over the First Michigan Artillery. Both are Civil War units, while in third place were Garand riflemen Sgt. Robert Dose (Keokuk, Iowa) and Sp/3c James Kessler, from nearby Army and Marine units. While the M1's made each man the equal of eight single-shot riflemen, the muzzle loading minié muskets won the match. The moral is obvious—good men skilled in using even obsolete weapons, are tough competition for the most modern arms made. And in addition to accuracy, Civil War rifles are not inferior in other ways to modern guns.

For example, Springfield rifle-muskets of 1855 and 1861 have a higher degree of parts interchangeability than most rifles made today. Each and every part of these guns will interchange with its like number in another rifle, with no fitting. Fundamental difference between the two is the 1855's Maynard tape primer. This was omitted as a wartime expedient on the 1861 arms. Since the Maynard primer was a favorite of Jefferson Davis, secretary of war in 1855, it may have been abandoned in the popular condemnation of anything to do with "the traitor" when he became president of the Confederacy.

New in the War were two types of bullets, for Springfield and Enfield. Called the "minié ball," the Springfield version differed from the original design of French chasseur captain C. E. Minié: The French bullet has grease grooves and a base plug which, on firing, drove inward, expanding the lead bullet skirt to fill the rifling. The undersized bullet could be easily loaded even if the bore was fouled by shooting. Experiments at Harper's Ferry Armory from 1853-55 evolved this principle of Minié's into the standard U.S. "minny ball," a conical slug of .58" caliber, with three grease grooves and a hollow base. The thin side skirt of the hollow base bullet expanded to form an adequate gas seal without the plug.

At Harper's Ferry the ballistic pendulum was used to check bullet performance. Bullet velocity was figured by getting recoil velocity, calibrating it in terms of the gun's weight compared with the bullet's weight. With the new 510 grain bullet, the mean velocity backed by 60 grains of powder in the 1855 rifle-musket was 963 feet per second. At this velocity the grease grooves produced drag in the air, but they were considered necessary evils, as the grease kept the fouling soft, allowing rapid shooting without cleaning. Modern shooters have improved on the invention. Recently a few New Jersey muzzle loaders seemed invincible—they never lost a match. Soft fouling which wiped down and left a clean bore on loading was credited for their good shooting. Competitors suspected they were filling the base cavities with a grease, but what kind? Ordinary lubricants failed to give the results. Then the truth came out—Crisco was the secret lubricant!

The British greased the cartridge paper instead of the bullet. The standard Enfield

.577 bullet was smooth, with a plugged base (Pritchett bullet) or with a simple base cavity as in the later "Enfield" projectile. The waxed cartridge wrapper protected the bare lead from contact with the bore. In combat, when factory-made cartridges gave out and battles were fought with bullets ladled around the campfire the night before, the Enfield's accuracy was not superior. But both Yankee Springfield and Southern Enfield were vastly superior to the smoothbore muskets that preceded them. Weapons improved, but marksmanship training regressed. Today's Skirmisher has a far superior fund of shooting knowledge than did Johnny Reb or Billy Yank when the rifles were new.

Smoothbore musket manuals told how to aim guns that had no rear sights. The effect on accuracy of cheeking the stock and placing the butt on the shoulder were discussed. The volunteer of 1847 knew more about shooting than the volunteer after Sumter. Civil War manuals for the soldier put heavy emphasis on line of battle and evolutions of troops. Apparently the idea of forming in line of battle, then charging with bayonets, was deeply ingrained in the military authors at the very time when rifle design had just made that tactic obsolete. The soldier treated his new rifle as a common musket. Terrible was the harvest of death when men discovered these new guns were highly accurate! One man learned the hard way — Captain Charles Griffin, commanding a Union battery at Bull Run.

He was confronted by a Confederate regiment in line of battle, but Griffin's superior, Major (later General) Barry was confused, and told him not to fire. "They are your battery support," said Barry.

"After the (Confederate) officer who had been talking to the regiment got through," Griffin related in examining the causes of the Bull Run disaster at the start of the war, "he faced them to the left, and marched them about fifty yards to the woods, then faced them to the right again, and marched them about forty yards toward us, and then opened fire upon us, and that was the last of us." So with these prosaic words Griffin described the volley of rifle bullets aimed by Southern farm boys which killed fifty of his artillery horses, many of his men; which put to flight the famed New York Fire Zouaves made of men accustomed to danger; which lost him his guns. The annihilation of Griffin's battery, in the words of Congressman Chandler of the Joint Committee on the Conduct of the War, "was the commencement of the repulse," the turning point of Bull Run, and the moment which gave confidence to the Confederacy and prolonged the war for four years. Aimed rifle-muskets from two to three hundred yards range was the decisive factor, putting Griffin's battery out of action in three volleys and breaking the courage of the Fire Zouaves. Griffin, before being attacked, could have "staggered them terribly" with canister shot. Griffin, after the first volley focused on his battery, could barely escape on horseback with his own life, leaving the dead behind. Skirmishers shooting these same rifles today develop a new awareness of the realities of combat during the Civil War. Then, rifle-armed soldiers capable of neutralizing a gun from 500 yards formed in line of battle, a company front wide, and marched to the roll of drums almost up to the cannon's mouth before presenting bayonets and breaking into a charge. Now only the memory remains, and the shooting has the fun of successful competition, whether stake shoot, balloons, or gun against gun in a down range artillery duel.

There is only one thing that makes me a little uneasy. Consider this . . . everywhere small bands of volunteers are drilling, learning to shoot, outfitting themselves with uniforms, haversacks, canteens, artillery, wagons and ambulances and all the trappings of war. It was the same in 1858, just before the War. And times and tempers seem as touchy now, as they did in '61 when my grandfather swam the Potomac (boated across, most likely, but family legend says "swam") to join a Richmond battery after the fall of Sumter. That's what's worrying me . . . all these Civil War "centennial" and "commemorative" programs a-fixin'. Like, for instance, what is being scheduled in Charleston harbor for the 18th of April, 1961? The Civil War centennial should begin with a boom if the schedule means anything . . . a century ago Fort Sumter was bombed. With some Southern states buying arms "to repel Federal invasion to enforce Supreme Court decisions," surely no modern American would be so insane as to start the War all over again?

WHY NOT SHOOT AT HOME?

(*Continued from page 34*)

me for a couple of week-ends. We talked a lot about the fun we'd had; we shot a little, marked targets, shot some more . . . and then I was shooting alone again. I didn't like it. I'm fond of that boy, like to be with him. But you can't do woods-style plinking on a properly run target range; the rules prevent it, and the rules are right.

So—how about at home?

A fellow shooter at the club, also a father, threw some light on the subject. My problem, he told me, was not an uncommon one at all. Why didn't I get Ronny a pellet gun and set up an indoor range, using targets that would offer a bit more excitement, a bit more room for imagination, than paper ones?

I bought Ronny a Crosman Pellgun, and set up a backstop made out of a four-by-six-foot piece of plywood. The range was our basement. The backstop was bigger than need be, but I had ideas about moving targets, novelty targets, things to keep a boy interested.

Ronny was only mildly interested, at first. We spent an evening finding out where the rifle shot and what could be expected of it. I was amazed at the way the little gun grouped. It would lay them into pretty close to one inch at 50 feet, and that's good enough for all practical purposes.

I sprung my little surprise the next Friday night. As fathers know, this is the time when a boy touches the old man up for an advance on next week's allowance. I heard the usual tale about unusual, unforeseen expenses, and I nodded. I picked up the Crosman and motioned to him to follow me down the back stairs. I switched on the basement lights and pointed to the backstop. I had set up a short length of two-by-six, on edge, in front of the plywood, and I had tacked spring-type clothespins along the back side of the two-by-six. The clothespins held the targets.

"What's that, dad?"

"Those, my boy, are the things you've been asking for. Half-dollars. There are eight of them. You get all you can hit in ten shots, shooting offhand, standing, from the usual firing line. Knock a coin out of the clothespin and it's yours."

My son is a sportsman; most kids are. The first three shots went fast. No hits. The deliberation with which the next three shots were fired reminded me of a Schuetzen match between old men, but it got one hit. Ronny crowed. On the next two shots, he was obviously tiring; the pellets went wide of the mark. The final two were jerked.

Ronny looked thoughtfully at his lone half-dollar. It wasn't as easy as it looked, but he had done about as well as he had hoped to do by mooching; and it had been fun.

I said, "That's enough for tonight. You can have ten more shots tomorrow night; or every night, for that matter. And of course you can practice as much as you like. If you want to, we'll skip the regular allowance business and you can shoot for your money."

It didn't take a bright eleven-year-old many seconds to figure that, if he got as much as one half-dollar a night, he'd be ahead of the game. I had a taker. And if he improved with practice, he'd be rolling in money.

Things moved briskly from then on. I was kept busy buying pellets and gas cylinders for Ronny's practice. We had to pull him away from it to do his homework. He didn't get his half-dollar every night at first, but he got better. The night he nicked me for four half-dollars we had a conference and, by mutual agreement, changed the targets to quarters.

Word had gone out around the neighborhood and pretty soon we had a shooting club of our own. Strict rules were set up, and strictly enforced. But we kept thinking up new, novel, and interesting targets, and the kids loved it. One night they invented an anti-aircraft game: a wooden model plane suspended from a string in front of the backstop, so many points for hitting the plane, or you could shoot for the string and win the jackpot. Hits, or even the breeze from near-misses, kept the little plane moving, and it wasn't too easy.

Later, they formed teams, hung a top from the string in place of the plane. The top was suspended from its point, and it had a red stripe painted down one side. One boy would shoot, try to spin the top in one direction. Then a kid from the other team would shoot and try to spin the top the other way. They

shot from a "bench rest"—a kitchen chair turned so that its back provided the "rest"—and there was a time-limit counted off in a chant by the other team. It was fun. I enjoyed it, myself. And by the time we had used up a given number of model airplanes and tops and what-have-you, we had the makings of some real good riflemen.

Ronny, all this time, was still shooting for his weekly allowance. I had to negotiate new rules with him frequently, to keep from going broke. But he regarded each change as a challenge so long as I announced them well in advance and let him cash in a little on his prowess before making the rules harder.

I don't have to worry about shooting alone now. I don't go to the range, myself, quite as often as I used to do, what with all the fun right here at home. I enjoy the shooting myself, and I get a real kick out of the fun the kids have, and out of seeing them turn into really skillful (and really safe) shooters. They're as tough about safety now as I am. Any new kid who joins the gang has to watch his step with that rifle, or he doesn't get to shoot it. And nothing gives the kids more pleasure than to set up a new game, practice it in secret, and then beat the old man at it.

We're thinking now of setting up for .22 rifles. It can be done, all right. A man I know has a range in his home basement on which he shoots not only .22 rifles but handguns up to and including the .44 Magnum. He solved the backstop problem with commercial backstops, the kind you see advertised, that catch the slugs in a spiral trap.

The noise problem was more complicated, but he has solved that too. He built a "silencer"—not one of the kind you screw on a gun's muzzle, the kind the law enforcement boys look on with such disfavor, but a contraption more like a telephone booth with portholes on opposite sides and acoustic tile sound-baffles on the inside walls. It works exactly like the mechanical silencers, "baffling" the sound so that only a very little of it gets outside the "booth." The shooter holds the gun muzzle inside the booth. When he fires, the neighbors and the people upstairs don't hear it.

A firing booth like this needn't be expensive. You can build it yourself. Two-by-fours and an appropriate square footage of plywood and cellotex or soundproofing tiles will do it. I'm planning to carry the idea a step further by improving the acoustics of the baffles; and I've got an idea or two about lighting. Probably every man would figure his own variations, but the idea is sound; it works. We fired a .44 Magnum through the booth the other day, and even that big cannon was muffled.

The backstops, commercial variety, cost something, but they last practically forever. And a man could build his own by setting up a slanted plate of three-eighths-inch armor plate with a sand-box at the bottom. The range need not be 50 yards, or even 50 feet; all you need to do is to size your targets according to the distance you have available.

You don't even need plans to work from, to build the booth. A look at the picture will give you the idea, and the actual building is no more complicated than building a box. If you decide to set up your own armor-plate backstop, the National Rifle Association will gladly advise you about angle of slant, thickness and type of plate needed, and other details. The main thing is, get started, and get shooting. Properly managed, a home range can be its own "court of domestic relations!"

ON THE LEGAL FRONT

(*Continued from page 8*)

outspoken groups as the National Sporting Goods Association through their Secretary, Mr. G. Marvin Shutt, have expressed a desire for stronger laws in the *punishing aspects*. As Shutt recently phrased it, "If a man knows he faces an additional twenty years just because he uses a gun, he'll think twice about committing a crime with a firearm." Shutt, like so many others concerned with pro-gun laws, considers that stricter punishments for anybody who "steps out of line" with a firearm, be it pistol, rifle, shotgun or Buck Rogers ray pistol, will have more deterring effect than present regulations which merely hamper legitimate commerce, and discredit the gun business in the eyes of the public.

Most recently formed group proposing to act as spokesmen for the gun dealers is the American Gun Dealers Association with headquarters in Washington, D.C. Close to the Federal pulse, association president Arthur Cook with the association's general counsel Fred Rhodes, Jr., will be in constant touch with the rule makers on regulations proposed and anticipated. It may be that through the operations of this Association, better gun laws can be proposed and bad ones repealed. Certainly the officers forming the association, including their "public relations manager" Garret Underhill, are nationally known for their abilities in various aspects of the gun field. Underhill has long been an arms writer and is often published in national magazines.

Meanwhile, the Treasury is not supposed to suggest changes in the laws. Thus it is not necessarily up to the Treasury to call a conference of pro-gun people *before* the publishing of regulation changes. It is only correct for the Treasury to submit new regulations to the approval or disapproval of interested parties through the medium of the Federal Register. It was in the Federal Register, for example, that the revised regulations to the Federal Firearms Act were first published. Since the Treasury cannot come to the people, the people must go to the Treasury. Since the Treasury staff evidently lacks adequate technical firearms information and has no person sufficiently well versed in firearms history and design to enable it to avoid pitfalls such as "currently available commercial ammunition" exemptions, the people must supply this lack of information.

The way to do this is through your local gun dealer who can coordinate shooters' ideas.

Dealers now affiliated with the National Sporting Goods Association should express their customers' views to their group spokesmen at NSGA headquarters in Chicago. Dealers affiliated with the American Gun Dealers Association should express customers' and their own views on gun laws through their organization. That way the active legislative officers of these and other associations concerned with the effect of bad firearms laws will be able to work with the Treasury to curb impractical regulations, and prevent a recurrence of the outburst of last August. For pro-gun people to "fight" their own Treasury Department is senseless. The Treasury agents have indicated the correct way to get good gun legislation: the Congress. The business of the Congress is to make laws, and pro-gun enthusiasts should see that Congress does just that. Through existing dealer organizations, the voice of the people can be heard, and new laws made to correct bad old ones.

GUNS Technical Staff

New Colt and Savage .30-Caliber Rifles

These two new rifles are radical departures from anything either company has made before. The first one is Colt's "57" FN-action sporter in .270 and .30-06 calibers, first Colt rifle since 1910. The "57" is assembled by the Jefferson Corp. for Colt's. The barrel is ratchet-rifled to a new plan for small arms. Jefferson is a new firm with a great deal of arms know-how. Boss-man is Art Murtha, formerly president of High Standard. Harry Sefried is the designer. He has done major engineering and design work on rifles and handguns at various of the old factories in Connecticut. The barrel is Sefried's idea, and is unusually accurate. It deforms the bullet very little while other rifles with deeper-cut grooves may leave terminal burrs on the body of the bullet on firing. The new rifling gives the new Colt high accuracy for a hunting-weight rifle. The front sight, a sleeved-on job, fits so well sweating is all that is needed to hold it on, but a set-screw has been used to reassure cautious riflemen who might fear it would shoot loose. Action is the standard FN-mauser bolt system made and imported expressly for the Colt "57." The stock is a sharply designed job by Reinhard Fajen, while the scope is supplied by the maker of the "Texan" especially for Colts and is known as the "Coltmaster." Price on the plain grade is $129.95; on the deluxe with high comb stock for scopes: $149.95. Coltmaster scopes with top mounts list for (2½X) $47.75 complete, and (4X) $54.75 complete. For the man who wants a top-grade hunting rifle with nothing more to buy, the Colt "57" is "it."

Firing the Colt "57" revealed consistent accuracy. Weighing 7½ pounds, the Colt is beefy enough to hold zero, light for a good all-around sporter. Some ask, "Why another FN sporter?" The answer is now Colt can market a barrel of unusual design in a rifle as rugged as any, at very competitive prices. The outside assembly of the gun recalls Sam Colt's "Walker pistol" days when, for greatest economy, he subcontracted his army revolver to Eli Whitney.

That Colt's again sells long guns is no surprise, for among the moves made by new management to increase market coverage was a new policy: that no shooter should have to "go outside of the Colt line to satisfy his wish for a gun." Rifles and, soon, shotguns will once again be sold under the Colt brand. Eventually, as demand increases and designs are perfected, new Colt rifles actually manufactured right in the Colt factory may be expected. Meanwhile, by subcontracting—something which every maker of arms does to a greater or less degree—Colts brings to shooters a modern, reliable sporting rifle made to exacting Colt specifications of quality, serviceability, and accuracy.

The second new rifle is the Savage Model 110, which sells for just a shade under that, $109.75. This is a remarkable achievement in bolt action rifle design. It is not a "Mauser." Aside from Lee-Enfield and the straight pulls, every bolt action rifle has front locking lugs and an extracting cam on the receiver—except this one! These main Mauser ideas exist in novel form on the Savage. It has *four* front lugs, and the extracting cam is *on the bolt* body.

The bolt cap is a plug that backs up the firing pin spring. Unscrewing this plug eases the spring. Then the sear-cocking roll which has a pin end can be pulled out of the firing pin spring retaining sleeve. When this is done, the pin complete with spring falls out of the back of the bolt, and can be disassembled. The pin's forward motion on firing is arrested by a front sleeve that screws onto the rod. Fitting is an easy adjustment of the front sleeve for firing pin protrusion. The basic design of the bolt is so simple any lathe operator can make most of the parts. The bolt head has a cross pin that holds it to the body: it retains the second set of lugs which do not rotate, but run back and forth as solid bolt guides and block gas in case of a popped primer. The bolt head is easily lifted off by pressing out the cross pin with the tip of the firing pin as a tool: when assembled, the firing pin goes through a hole in the cross bolt and keeps it in place. A crimped spring washer keeps the bolt head assembly snug but very free and easy on operation: I found I could not cramp the bolt in the receiver, as there is nothing to cramp (such as guide rib or secondary stabilizing lugs like M1903 to wedge against receiver side). At the back

Savage .30-06 was fired with Savage ammo; Colt "57" (right) shot with Norma in field plinking with new rifles.

of the bolt, by the sear-cocking roll pin, is the cocking cam. As the bolt turns on opening, the cam pushes the roll back. It is on the side of the bolt, and when all the way "cocked," the side lever that is also the bolt stop pops up into position and the trigger-sear group holds it. Pressing the trigger releases the side lever and this snaps down, allowing the firing pin to drop. The side lever is a bolt stop, a sear, and a "cocked" indicator. Firing pin fall is crisp and snappy, the let-off very sharp. The extracting cam (which also is a gas shield) is a half-collar at the rear that stays put as the bolt turns. The low-mounted handle (very pleasingly set into the stock) pushes against this collar to free high power shells on first extraction. The width between the ends of the collar allows it to be slipped off the bolt body in disassembly, by getting it opposite the cocking cam. Cleverly, a bearing ball is used in a bolt body detent to steady it. The detent ball is retained by another hole drilled at right angles, with a similar bearing ball and spring slipped into it to jam the detent ball into place. The second ball acts as a block, permanent, easily disassembled by using a fine probe if desired, but always working solidly with constant detent pressure. The elaborate description is far more complex than the utterly simple bolt design of this remarkable rifle. Stock-contained magazine holds four rounds; with one in chamber for five.

Sights on the Savage are blade front and their own design leaf rear sight. The middle of the rear leaf is picked out for easy visibility with a white line, but the fact the leaf folds forward may be inconvenient to some. I carelessly let it fold forward and actually aimed with it that way! But it permits low scope sight mounting, since the stock is plain comb, without Monte Carlo, and well adapted to offhand snap shooting.

The Savage Model 110 comes now in .30-06 caliber; will be available in larger sizes including magnum .300's. It is designed to permit Savage, without entering into a high priced tooling-up race, to compete with the more expensively constructed Mauser-system domestic and imported rifles. The result is an exceedingly light arm (minor parts are made of light metal or plastic) but one that is impressive in its attention to important details. The tubular-section receiver is finely polished and blued with a rich deep blue lustre that looks almost as intense as expensive heat blueing. Money has been spent where it will do the most good; on the all-new action, on the finely polished and rifled barrel, on the slick blueing. In shooting the gun I had little chance to really put it through its paces. Standing at the crest of a hill—I had been firing machine guns into a gravel pit—I shot the Savage offhand in a bitter cold wind. Surprisingly, after shattering a number of rocks at distances of about 100 to 150 yards, I realized I was taking a sight with the *rear leaf folded down.* But shooting about fifty shells, Ball M2 and some of the Savage .30-06 loads, I found it shot well enough. Scope tests will come a little later. Meanwhile, as a light rifle, with slim stock and the whole works weighing exactly 6 pounds and 6 ounces, Savage's gun designers have come up with a lot of gun for not much money.

GUN TRADITIONS NEVER DIE

(*Continued from page* 15)

sponding interest in repeating weapons and in pistols and revolvers as inventors wracked their brains in efforts to circumvent Samuel Colt's patents and later those of Smith and Wesson.

In Connecticut, centers of firearms manufacture were Norwich, New Haven, Middletown, and Hartford. From the flintlock era to a few generations ago, Norwich men made guns in the plants of Hopkins & Allen, Norwich Arms Co., Bacon & Co., H. Smith, Hood Firearms Co., Norwich Pistol Co., T. E. Ryan Co., Thames Arms Co., Thayer, Robertson & Cary, J. D. Mowrey, and Smith & Wesson.

During the same period in Middletown, guns came from H. Aston & Co., North & Couch, E. Savage, Nathan Starr, and I. N. Johnson. In Hartford, the prominent names were Colt, Christian Sharps, C. M. Spencer, and Billings & Spencer. Eleven other Connecticut communities had one or more small plants located beside brooks, streams, and rivers that powered their machinery. New Haven, where four of Connecticut's seven gun plants are located, always had its gun makers but at no early time was the firearms industry there the flourishing business that it is today. All of the shops were small. Even the New Haven Arms Co., destined to become the Winchester Repeating Arms Co., employed only 40 men and eight women and had a monthly payroll of $1,000 a century ago. Others, even smaller, were Bliss & Goodyear, Plant Mfg. Co., Morgan & Clapp, Reynolds & Plank, and T. J. Stafford.

Sedate, gun-loving Connecticut men bought up part of the guns produced in their state. But the country was growing fast and men moving west with it wanted guns, among them the famous "Whitneyville Walker Colt."

The Whitney Armory was still operating in Hamden in 1848. There Samuel Colt worked at the Whitney Armory, making 1,000 ponderous Walker Dragoon sixguns. With his profits from the .44 caliber Dragoons as a springboard, Colt founded his own armory in Hartford where it has been ever since.

Six years later, in Norwich, Horace Smith and D. B. Wesson formed their famous partnership and began making what was to become known as the Volcanic pistol. After patenting their first cartridge revolver, Smith and Wesson probably saw the end in sight for a lever action handgun like the Volcanic that required both hands to operate, so they sold out to the Volcanic Repeating Arms Co., and began to concentrate on revolvers and cartridges.

The Volcanic Repeating Arms Co. made pistols, rifles and carbines. Volcanic arms propelled a conical bullet at a lethargic 500 or 600 feet per second at the muzzle, depending upon caliber and the modest amount of propellant crammed into the hollow-based slug. Apparently the company finances were as low-powered as its weapons, for on Feb. 18, 1857, it closed its doors and 50 employes went job hunting.

Most of them did not have long to hunt, thanks to a Volcanic stockholder and New Haven shirtmaker, Oliver Fisher Winchester. He reorganized the Volcanic firm as the New Haven Arms Co., re-located in New Haven. B. Tyler Henry, the new plant manager,

developed the ".44 Henry Flat" cartridge with a 216 grain bullet pushed by 26 grains of black powder. Muzzle velocity was upped to 1,200 feet a second. The Volcanic design was adapted to the cartridge and the Henry rifle was born, the first practical cartridge repeater. Six years later, modified by adding a loading part to the frame, it became the first Winchester, the Model 1866.

Frontiersmen received the gun like a long-awaited sweetheart. By 1870, the shirtmaker had absorbed the competitive Spencer Repeating Arms Co. Five years later, new competition arrived on Winchester's home grounds in New Haven—the Marlin Firearms Co. Both are still there.

Factories were growing larger and offered many different weapons and calibers. The old tradition of the custom-made gun was still strong. The mass-production works offered a great variety of barrel lengths, checkering, engraving, plating, and other "extras" on *basic models to cater to the taste of those* who wanted something more than a plain assembly line gun. But with the growth of large factories, the small shops continued to exist side-by-side.

Years before, in Hartford, Samuel Colt had built the largest armory in the state. In 1859, Colt was employing 369 men making revolving rifles and pistols. Within two years the total was nearly doubled by war production. In the same city, 300 employees of Christian Sharps made the powerful, long-range rifles that would blast the buffalo from the western plains. But seven other small plants in the state shared less than 300 other employees at the time. The day of the small gun factory in Connecticut has never passed. Today Sturm-Ruger employs about 90 men; Whitney Firearms has less than half that number of regular employees. The number of men who work on Whitney automatics is difficult to estimate, since many parts of the Whitney are made outside the Whitney plant in various shops around the state. The Whitney Firearms Company is the newest and smallest of the Connecticut gun plants. It is an entirely new endeavor with no direct business connection with the old Whitney Armory in Hamden. But the philosophy of "a business for gentlemen" is there.

The Whitney Firearms Co., at present, makes only one model, a .22 caliber auto-

matic of futuristic design which has sold well. Planned are a target model and a center-fire model.

Years ago, the O. F. Mossberg plant was located in what was once an old gas storage tank. It is still there. The building, with tiny apertures and few windows, has been dubbed "the Roundhouse" by employes. From an unpretentious office in the Roundhouse, Walter Pierson, vice-president of O. F. Mossberg, directs the activities of his company. "We aim at the mass market," he said frankly. It is no secret that Mossberg makes popular guns at popular prices. But here, too, it is obvious that Eli Whitney's methods do not eliminate all hand work. Mossberg's slogan is "More Gun for the Money," and considerable hand work is required on Mossberg gunstocks. With the exception of a few power tools used in assembly, Mossberg guns, like all others, are assembled largely by hand.

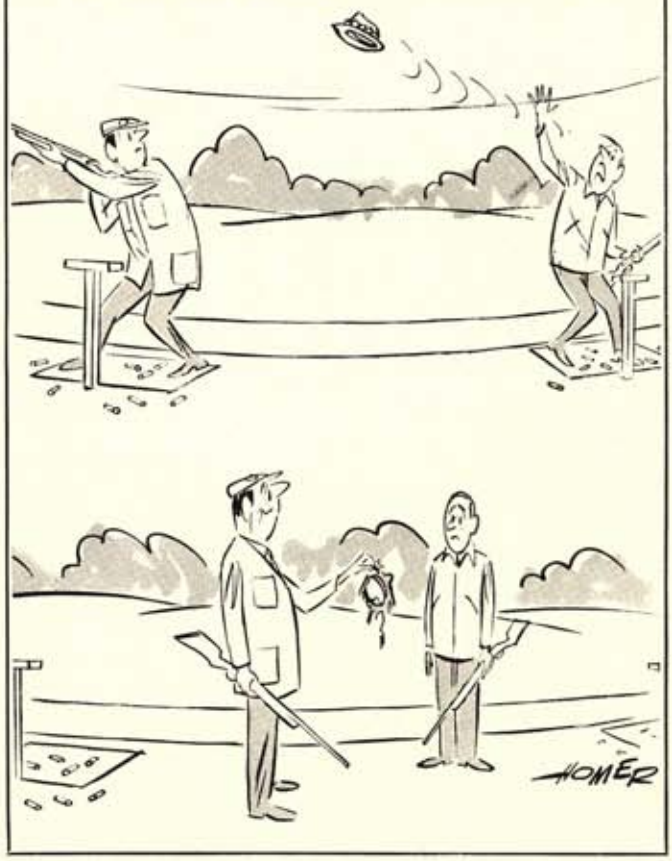
Conversely, the Winchester attitude is steeped in tradition, according to Robert McMahon, director of public relations. "The company's manufacturing philosophy over the many years has been to build shotguns or rifles that will function well," he said, "and, also, arms the shooter will be proud of, so well made they can be passed from grandfather to father to son, as millions have been." McMahon's statements are strikingly like the words of Oliver F. Winchester, spoken many years ago about the Model 1873 repeater: "It is strong and durable and not liable to get out of repair, as its mechanism is simple and constructed of the best materials in the best manner, and thoroughly tested."

The middle ground between Mossberg and Winchester is adopted by the Marlin Firearms Co., traditional competitor in the lever-action rifle field. Marlin's Lawrence B. Ferguson state's his firm's businesslike approach to gun building. "We are not attempting to reach the carriage trade market," he told me. "Our philosophy is to produce the best modern rifle or shotgun, made with good quality components, at a price range that will be attractive to the beginner or man of limited means."

The public demand also shaped the attitudes of the High Standard company, as well as its designs. Longer barrels, heavier barrels, slide locks, grooved triggers, all resulted from customer demand, says vice-president in charge of sales Bill Donovan. "The gun manufacturer who lacks flexibility in adapting his guns to the shooter's needs," said Donovan, "is going out of business."

Eli Whitney, gunmaker extraordinary, was first and foremost a gentleman mechanic, an educated, talented craftsman, and an engineer. Not only in arms factories but in every machine works in the world today are milling machines conceived by Eli Whitney. Prophetically, Whitney got his start by making 10,000 guns. Today's new firm bearing the Whitney name also started with an order of 10,000 guns. The cycle is complete.

PARTING SHOTS



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GUNS & AMMUNITION

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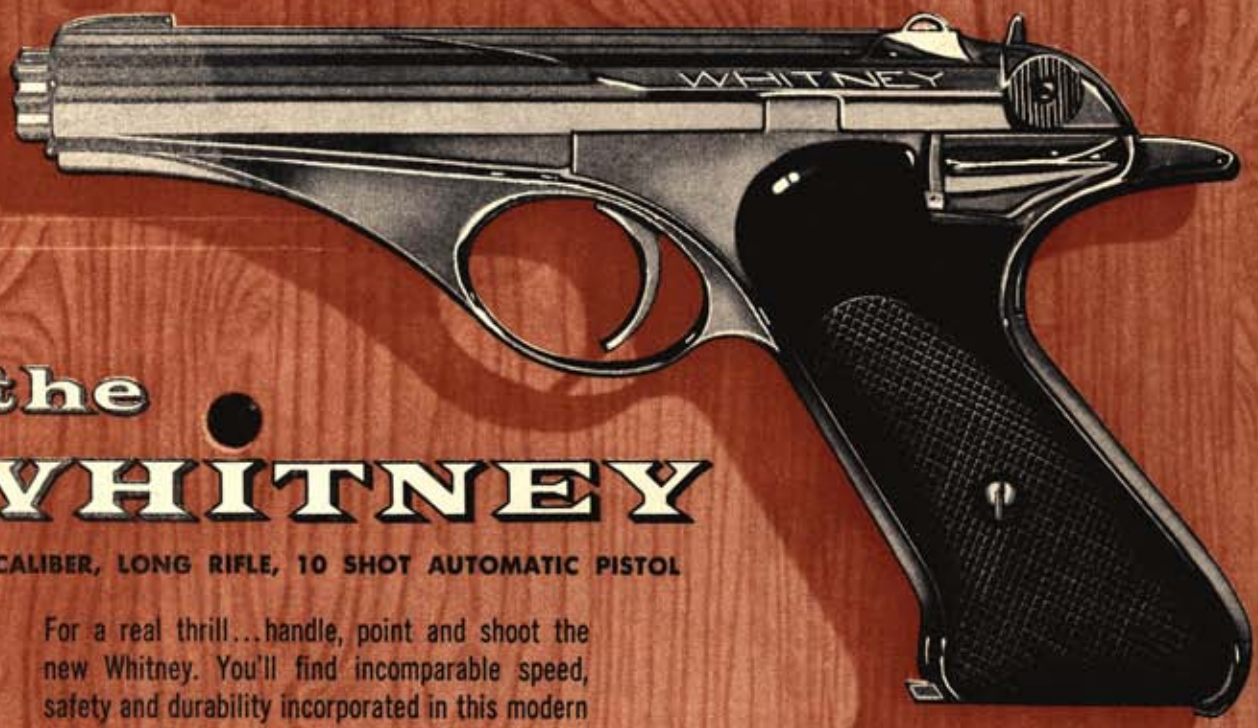

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