





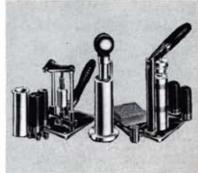
ECONOMY SET

All the tools needed for reloading one caliber. Contains: 310 Tool complete with dies to perform all operations on your choice of cartridge; Powder Measure; Ideal Handbook; two reloading supplements. Complete: \$31.50.



BULLET CASTING SET

Everything needed for casting lead alloy bullets. Contains: No. 45 Bullet Lubricator and Sizer; Mould for any Ideal bullet design; Lead Pot and Dipper; 3 lbs. of bullet metal; required gas checks. Complete \$29.50.



SHOTSHELL SET

Permits big savings and custom reloading for greater accuracy. Contains: Sizing Die; Straightline Re- and De-Capper; Straightline Hand Loader; Straightline CrImper; and Shot Measure. Complete \$29.50.



EZY-LOADER

Unbeatable for speed and accuracy.
When volume is important,
the Ezy-Loader is best for reloading
metallic cartridges or shotshells.
Press: \$35.00. With Dies and
Primer Feed for metallic cartridges: \$58.75.



HANDBOOK

The 160-page bible for reloaders. Perfect for giving to all your sportsmen friends. See your dealer, or mail \$1 for each copy, postpaid.

GIFT REMINDER CE	
(FOR YOUR WIFE OR GI	IRL FRIEND)
Quick-Load Set	Caliber Wanted
☐ Economy Set ☐ Bullet Casting Set	
☐ Shotshell Set	
☐ Ezy-Loader Press	

THE LYMAN GUN SIGHT CORP., MIDDLEFIELD 5, CONN.

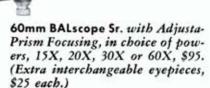


SCORE HIGHER!

Get the big, brilliant image of BALscope Spotting Scopes

For greater shooting comfort and the assurance of reliable spotting—for higher scores—you can't beat the optical performance of Bausch & Lomb BALscope Spotting Scopes. In either price range, BALscopes give the sharp, brilliant image, ease of use, and durable construction that promise life-long aid and pleasure for the shooter. Used with camera

tripod, BALscopes are ideal for the whole family to use—are easily packed on vacation trips. Before you buy any spotting scope, learn all the facts about Bausch & Lomb BALscopes. Write: Bausch & Lomb Optical Co., 20601 Lomb Park, Rochester 2, N. Y.



40mm BALscope Jr. with Drawtube Focusing, 20X, \$44.75.



BAUSCH & LOMB



Sportsmans Specials

GERMAN ARMY KNIFE



Made of finest Solingen steel. Holds edge sharp enough to shave with. Finest hunting, fishing. steel, Holds edge sharp enough to shave with. Finest hunting, fishing, and all 'round sporting aid made, Includes 23/4 blade, 13/4 blade, screw driver, Phillips screw driver, reamer - punch - awl blade, can opener, bottle blade, can opener, but blade, can opener, awl blade, can opener, bottle opener, and scis-



SPORTSMAN'S COMBINATION KNIFE

Fine, imported multi-purpose campers kit. Contains two knife blades, fork, spoos, can and bottle opener, saw and fish scaler, awi, screw driver, file, cork-screw, sailmakers needle, and scissors. High car-bon steel blades. 4-5/7" long-bone handle - com-plete in leather holster. F-148.

WER 60mm SPOTTING SCOPE



including tripod. Complete case, mount and tripod.

IMPORTED BINOCULARS



Ĺ			OFFICAL DEF	
	F-182 — F-105 — F-15 — F-183 —	6x.15 8x.30 7x.35 7x.35	LP. NET	10.75 17.95 17.95 20.95
	F:103 =	7x.50 7x.50 10x.35	C.FNET	21.50 24.95 23.95

Fed. Tax to Above Prices

NEW YORK, N.Y. 100 Sigth Ave

Radio G. 1.

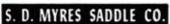
Include postage with BRONX,N.Y. 542 E. Fortham Rd MEMARK.N.1. 24 Central Ave.
PLAINFIELD.N.1. 139 West 2nd St.
BOSTON, MASS. 110 Federal St.



FREE CATALOG

"Quick-Draw" Holsters

- CUSTOM MADE
- THE BEST **SINCE 1897**



P. O. BOX 5247 EL PASO. TEXAS





ROSSFIRE

LETTERS TO THE EDITOR

Like Editorial Presentation

Your magazine is very good, You're on the right track. Don't let anyone force you into more technical material. What you're after is bulk circulation and bulk circulation, like me, is dumb.

You know the old story of an expert, one who knows more and more about less and less and finally he knows everything about nothing. It's hard to combat the tendency to get more and more technical as your own knowledge grows but it has to be fought against because as far as your readers are concerned, it's the old stuff over and over

Herbert Livesey Mamaroneck, N. Y.

I think that a word of commendation is in order for the splendid job that Guns Magazine is doing editorially. When I first watched the magazine on the news stand, it left a lot to be desired but now it has become quite interesting and has enough material to more than justify the fifty cent price.

I have always felt there was a market for another magazine, other than those already devoted exclusively to shooting, to present a little more newsy side. I am a shooter myself and apprecite the technical end but there are a great many others who like a little technical knowledge dished out to them plus a more newsy format. I think that Guns fills this need.

E. H. Sheldon, President Precision Tool & Gun Co.

In the past few months, I have been introduced to one of the best magazines for the gun man I've ever known. I would like to compliment you on your wonderful accomplishment in bringing to the public, and to the American sportsman, Guns. I have every issue for the past year and have read each one from cover to cover and have enjoyed it.

I am going to school here in Chicago but am from Huntsville, Alabama, where I enjoy the wonderful sport of hunting in the forest and fields of north Alabama. If possible, I would like to read an article on hunting bobcat. This to me is a form of hunting that very few people seem to enjoy but only because they do not realize the fun of it.

M. S. Pennington Jr. Chicago, Illinois

Buying A Gun For Your Son

My son, Johnnie, is only 12 years old but he has been pestering my husband and me for several years to buy him a gun. My husband had his fill of rifles while in the army, and for a long time I told Johnnie that "I wouldn't have a gun around the house. They are too dangerous."

Last summer Johnnie bought a pistol from one of his playmates at school and managed to find some bullets to shoot in it. The gun went off in his pocket, and badly burned the side of his leg but thank goodness didn't actually hit his leg or his foot. Our physician made out a routine gun-shot wound report which was sent to the police station, and they sent a policeman around to check up on the "shooting." He is now a real friend to our family, because after seeing Johnny and talking with him, he brought us a copy of your magazine with a story on "When to Buy Your Son A Gun."

I want you to thank writer Harvey Brandt for that story. It has literally changed our whole lives and really opened my eyes to how harsh and unfeeling my attitude must have seemed to my son. He now has a gun, a proper .22 rifle and he is shooting on a boys team which is supervised by the Police Athletic League. He shoots well, and my husband has promised to take him hunting next year with a real rifle for big game. Things are going fine at home, and the rusty revolver he bought at school reposes in ry desk drawer as a reminder-not a reminder to Johnny, but a reminder to me-of how serious our neglect of our son might have been, if the police offices and Harvey Brandt hadn't knocked on our door.

> Mrs. Jane P. Perkins Los Angeles, Cal.

Blasts 30-30 For Hunting

I have just finished reading your story on the 30-30 and I just can't help writing you to set you straight what a barrel of hogwash you are feeding the public. I shot a 90pound buck with your so-called rifle at a measured 30 feet between the eye and the ear and this after some bloke had blown off both hind quarters with a shotgun and I watched him disappear over a hill a mile away. Sure, I finally got him but they should sell dogs along with the 30-30 so a hunter could at least find the game. I have hunted for 14 years with a 30-30. It took me that long to get smart listening to guys like you. Sure it won the west; they didn't have anything better. This is 1955, sir, just who are you kidding?

Such bull in a magazine called Guns. Whew, that smell isn't gunpowder.

> George Wrav Milwaukee, Wisconsin

GUNS is published monthly by Publisher's Development Corp., Inc. at 8150 North Central Park Avenue, Skokie, Illinois. Second class mail privileges authorized at Skokie, Illinois. Subscriptions \$5 yearly in the USA.

BREVEX MAGNUM

MAUSER ACTION

Big game hunters have waited long for this! Now, at last...the first commercial, full size magnum Mauser sporting action built from the ground up on new tools and dies—definitely NOT a military offcast or reworked action, but a completely new action throughout.

- Chrome-Vanadium Steel, hardened and heat-treated, highly polished white finish
- · Hinged floor plate, internal release
- · Choice of 3 position or scope safety
- Streamlined bolt handle, permits low scope mounting
- · Gas vent hole on front receiver ring
- Magazine milled as one piece with trigger guard assembly, capacity: Model 300—6 cartridges, Model 400— 4 cartridges

MAGAZINE LENGTH...3-15/16" AVERAGE WEIGHT...3 lbs., 4 oz. OVERALL LENGTH...9-1/2" LENGTH BETWEEN MAGAZINE SCREW HOLES...8-1/4" THREAD... Metric, diameter 29 mm.,

12 turns to the inch



FOR CALIBERS .300 H & H. .375 H&H MAGNUM & OTHERS \$118.50

MODEL 400 FOR CALIBERS .404 JEFFERY'S. .416 RIGBY. .505 GIBBS & OTHERS

\$118.50



Husqvarna

ANA.

IMPROVED MAUSER ACTIONS



Superior—stronger in construction, yet lighter in weight than other Mauser actions. World famous Swedish Steel; Nitro-Proof Tested; polished and blued; positive slide safety; hinged floor plate; drilled and tapped for most scope mounts and receiver sights.

MAGAZINE LENGTH...3-3/8"
AVERAGE WEIGHT...2 lbs., 11 oz.
OVERALL LENGTH...8-3/4"
LENGTH BETWEEN TRIGGER GUARD
SCREW HOLES...7-3/16"
THREAD...Whitworth, nominal diameter
25.1 mm., 12 turns to the inch



Husqvarna

BARRELED ACTIONS

CAL. .30-06. .308. .270 . . . \$89.50

Guaranteed, proof-fired and Nitro-Proof Tested with precision gauging, chambering and head-spacing.

ACTION...HVA Improved Mauser Action BARREL...Round tapered; finest Swedish Steel highly polished and black oxidized; equipped with hooded front ramp sight, silver plated bead. LENGTH OF BARREL...23-3/4"
BARREL O.D....Receiver end—1-1/8"
Muzzle end—9/16"

OVERALL LENGTH...31-15/16" AVERAGE WEIGHT...5 lbs., 2 oz. RIFLING....30-06, .308, 4 lands and grooves, 12" twist, .270, 4 lands

and grooves, 10" twist

SOLE U.S. AGENT

TRADEWINDS INC.

P.O. Box 1191-H Tacoma, Washington





GUNS in the NEWS

In Hollywood, movie cowboy Tommy McLeod was on location working in a western when he spotted a mountain lion in the Topanga Canyon. He drew his gun fast and fired six shots at the animal. But the lion was not hit. McLeod's six-shooter was loaded with blanks.

0 0 0

Big things are expected of a recent applicant for a hunting license at Havertown, Pa. His name: Daniel Boone.

0 0 0

Harvey Schurr returned to his home in Scarsdale, N. Y., after his first safari in West Africa in which he killed 300 animals, including a leopard, four hippopotamuses and an elephant. Another rather remarkable thing about Harvey Schurr: although he's handled guns skillfully now for seven years, he's only 14.

0 0 0

Beginning in the early part of 1956, the U. S. Fish & Wildlife Service will conduct a survey to determine the amount of time and money spent annually by American hunters. The first of its kind ever conducted, the survey will be nationwide and will provide information on the number of persons (12 years or older) who go hunting.

0 0 0

Edgar I. Vanderveer was a politician of considerable note around his hometown of Freehold, N. J., but when he died recently at the age of 85 the thing that people remembered most about him and that was featured in his obituary notices was this: once, in a shooting exhibition, he outshot Annie Oakley by one clay pigeon.

0 0 0

In Glenboro, Canada, Steve Foord-Kelcey bagged a mallard without firing a shot. The bird came in low on the opening of the new season and Foord-Kelcy ducked to avoid being hit. The duck hit the barrel of his shotgun and was killed.

OVER 13,000,000 GUN PARTS

WRITE WANTS FOR ITEMS NOT SHOWN

Now . . . YOU CAN HAVE YOUR OWN CUSTOM SPORTER in less than 1 hour WITH THIS KIT

AND BARREL Completely FINISHED Only from any MAUSER '98, ENFIELD'17 or SPRINGFIELD'03

CHOICE 2 OF 30-06 or 2 1270 CAL All the hard work is done for you. Simply install this NEW BARREL and STOCK—then have head 110K 110K 110K space checked.

YOU GET! grand NEW 22" blued groove, crowned muzzle, threaded and chambered—ready to screw into your action. Brantfully grained American walnut stock, completely finished and green blue, and all the first property and all the property for a skilling for preferentiary headspace checking and illustrated "how-to-do-it" instructions.

MODERN production machinery and tooling enables us to make this big, money-saving KIT offer. Note that price of the entire kit is less than the usual cost of a good sporter barrel—or a Exercise 1. It is already sporter barrel—or a Exercise 1. It is already sporter-stock—and still have your own CUSTOM SPONTER at lowest possible cost. Remember, all the hard work is done for you. All you have to do is screw out old barrel and screw in the new one—and tighten stock screws Minor inletting may be required on stocks used with military barrels or barrels of other than our make. All STOCKS SHIPPED INLETTED FOR OUR SPONTER BARREL.

DEALERS: Order an ASSORTMENT of these fast-selling Use them to build NEW SPORTERS on YOUR ACTIONS. Discounts on 3 or more KITS.

FLUID STEEL BARREL BLANKS FOR DAMASCUS & TWIST SHOTGUNS!

C



NEW! 22 CALIBER RIFLE BARREL

New in white, 630 on shank, 750 at shoulder tapering to 560 at muzzle, unthreaded, w/front sight dovetal out, 24 Bbl. 53.50 plus 40c postage. SAME, amouth bore for shot cartridges, 51.95 plus 40c postage.

.30 CAL. BARREL—24" BRAND NEW! CHAMBERED FOR .30-06

Finest 4130 steel, 4-groove, 1 1/16" at shoulder, To" on threads, 1-turn in 10 standard rifling, A good heavy-tapered, turned harrel at less than 15 production costs! A real buy only \$4.95 plus \$5c postage.

SHOT BBLS.

Semi flinished 6" .3s cal.

smooth bore pistol barfull target rib. The lug all bottom makes it for the for use on S&W models. Unthreaded shark, 162-26

for full land dia. Special, at less than cost of forging alone.

\$2.65 ppd.

GARAND BARRELS—Brand new, \$14.95 ppd. Used, v. g. throughout\$9.95 each.

22 CAL (e.d. 415)
NNER 6 OUTER
MAGAZINE TUES
1985,", easy conversion to mass any tubular ,22
by simply sawing to length, New, set — \$1.00 ppd.
Degen sets, \$7.95.

PISTOL BARRELS

Brand new, straight lengths, 34" x 8", for extra long and/or fancy barrels, Supplied chambered for .45 auto or unchambered, state which . . . 39.95 ea. — or 2 for 86.50. (Same barrel, smooth bore for shot cigs., \$1.75 ea.) STEVENS PISTOL BARRELS

Limited few for the Model 35 though pistols in 22 cai. (154" from hinge pin to breech end. New, in white, unchambered, unpulsable out, without extractor. Under pre-war price. 6", \$7.50 ca., 8", \$8.75 ca.

SHOTGUN BARREL BLANKS
POF converting to auto loading, single barred,
90° or 28°, 20 and 410-ga, 28° or 20°, 41 1 1 1.6°
at breech, full-choke, Frice, unchambered, 82.95;
dad 83.00 for chambering & heading, plus 55e pp.

WINCHESTER '94 PARTS SPECIAL—ALL NEW

MOST CRITICAL PARTS KIT - take with you when hunting consists of ex-tractor, ejector complete, firing pin, & mainspring—Special price (save over 50% or \$2.00) Only \$1.95 ppd.

MAJOR OVERHAUL KITnever again at these prices! New breech bolt, carrier, link and complete locking bolt—your discount over double that of even bires. even biggest dealers. All for \$7.95 ppd

MODEL 94 set of new hammer complete main spring & only \$1.75 ppd. main spring



HANDGUNS MANUAL—Complete Parts details, ballistics, care, as-sembly, marksmanship, etc., for Detective Special. Same would apply to Saw 38/44. Magnum, etc., also Colt Shooting Master, Police Positive, 33 Supper. A P.M. full of important informa-tion, 223 p, \$1,000 ppd.

U. S. CARBINE MAGAZINES



CONVERSION KIT

reduces to 5 shots, only way to make Garand fully legal for hunting in "Five Shot" states, leasily installed & removed). Set, complete with special follower & 2 five shot clips, \$3.95. Extra 5 shot clips, \$55 ea. Standard 8 shot clips, \$2.00 per

* MARLIN BARRELS *

Super Rare—Just Discovered after many, many years of Storage—All Absolutely NEW, only occasional slight outside blemish from years of shifting and storage. Can be converted for use on many other makes.

FOR MODEL 1893-36

7 4 11 11 12 14 14 14 14 14	
28-55 Caliber, 20° full octagonal 20° full oct. (Takedown) 20° runnt Takedown 20° round Carbine 22-6 Caliber: 20° full octagonal 20° round Carbine 410 Shotgun 22° shotgun barrel	16.50 12.50 8.95 12.50 12.50 8.95
FOR MODEL 1895:	
.33 Caliber: 24" found Takedown .45-70 Caliber: 26" full octagonal	
FOR MODEL '94:	
.32-20 Caliber: 20" round Carbine .38-40 Caliber: 20" round Carbine	
FOR MODEL '92;	
.32 Cal. Rim or C.F.: 26" full octagonal 24" round 26" round	7.00
FOR PUMP SHOTGUNS:	

12 Gauge: 25" and 26" barrels; imp. cyl., mod. & full choke ----- 9.95

UNHEARD OF BARGAIN!!

UNHEARD OF BARGAIN!!

SPORTING & TARGET REAR SIGHT for Mauser, Springrield, Japs & Enfield (with "ears" removed). Fast coin slot adjustment for windage and elevation, Completely milled, no cheap stampings. Purnished with mounting screws & TWO sight discs (one fine, one medium) A true \$7.05 value. YOURS POIL LESS THAN 12 PHICE (while supply lasts . only \$61.95 ppd. Extra receilal: 2 of above . \$6.95 ppd.

INSTANT GUN BLUE

WE HAVE OVER 15,000,000 GUN PARTS

stock for immediate delivery. Parts for modern, absolute and foreign gur-fine quantities, send booken part or rough shetch with full information.

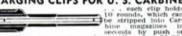
SUPER BUY 95c

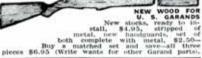
stamp sights as shown, ridges on ramp make it no glare—in white, .525 LD, Note design that permits use on any rifle by turning end of barrel to .525 assuring smooth appearance. Also makes fine visito, start. rifle by turning one of barrel to .525
assuring smooth appearance. Also
makes fine pistol sight.
Each 95c—Extra Special \$9.00 perdex 565.00 per 100.

CARBINE REAR SIGHTS

adjustable for windage & elevation, fits all U. S. Car-bines, slides into receiver dovetail—2 minutes to in-stall, as issued, \$1.85 ppd.

CHARGING CLIPS FOR U. S. CARBINE







MARLIN Model '92, '97 & '94 Rifle stocks, new, shotgun type butt, ready to install, \$5.95 ppd.

U. S. CARBINE STOCKS

brand new, complete with new recoil plate heat plate, serves, parts, \$3.95. Very light color stocks, finish anded but not stanted dark, same prices, state it issue stained finish or light unstained finish is desired. Carbine Handguards, new, \$2.50 pps. Write wants for other carbine parts.



Machined to fit most rifle harrels, (.550 to .680); in white, no glare ramp surface. Stand. Dovestall, can be mounted with seriew or soldered, SPECIAL: 60c ea., \$5.40 doz., \$38.50 per 100.

HOODED FRONT SIGHTS

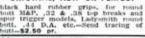


LYMAN RAMP SIGHT HOLDERS

Brand new, type using taper pin rather than solder. Sight is ,605 i.d. and can therefore he rearned to any size over desired, Less than 'is price at \$2.95 e. (if blade sight is desired, and \$1.25 and specify gold or lyory and model of gum).

SMITH & WESSON

ORIGINAL, NEW OR PERFECT



Satisfaction Always Guaranteed—No COD's ★ NUMRICE ARMS CO., WEST HURLEY 1, N. Y.



WATERPROOFS

YOUR GUN STOCK-INSTANTLY!

YOUR GUN STOCK—INSTANTLY!

Proud owners of fine guns everywhere who've used STOCK-GLAZE say they've never before seen such an amazingly quick-acting Gun Stock Care product. For STOCK-GLAZE truly cleans as it oils, at it protects and beautifies your gun stock . . . almost instantly!

STOCK-GLAZE is so simple and casy to use, too. Just apply a small quantity with a soft cloth and rub. Right before your eyes your gun stock is transformed into a thing of beauty—takes on a high-gloss, hard new materproof finish — no matter what its original finish . . . whether raw wood . . . oil . . . or hard surface. And it won't crack—ever.

So to make your gun a show piece you'll be proud to display, get STOCK-GLAZE from your dealer right away. Or if his supply hasn't yet arrived, order direct. Big two-ounce jar only \$1. Serujecmen—get it of your PZ.

SATISFACTION GUARANTEED OR MONEY BACK.

SATISFACTION GUARANTEED OR MONEY BACK.



LOOK FOR THIS DISPLAY AT YOUR DEALERS

DEALERS:

If you're not now selling STOCK-GLAZE write for special discounts. It sells fast when you display it in the attractive merchandising package shown at left.

C. PAUL & COMPANY, Dept. G. Skokie, Illinois 8140 N. Ridgeway Ave.



MY FAVORITE GUN

BY HUGH O'BRIAN, star of the hit television program, "The Life and Legend of Wyatt Earp'

The Colt .45 which I use as Wyatt Earp in television is said to be a good replica of the gun the famous marshal used. He liked his and I like mine, especially for its fine balance which makes it easy to draw. He also used his to "buffalo"



unruly citizens, a phrase which means hitting the culprit over the head with the barrel. In the television version, I use a rubber gun for this purpose to save the skulls of my fellow actors.

BY SID CAESAR, star of the popular TV comedy show, "Caesar's Hour'



I've got a bit of a gun collection and my favorite is a Winchester Model 70 .270, because my friend always borrows it . . . so it must be good. There is one thing I check before I let him touch it. I check whether this unloaded gun is loaded. And I always caution him, my friend, to unload every gun that he is certain is unloaded. And oh, yes, I tell him never to pick up a gun when he is loaded.

The Perfect Christmas Gift for THAT Man!

Prevents Guns from Rusting

Something New, Novel and Very Practical, too

No Technical Difficulties to Trouble You!



DAMPP-CHASER®

Von Lengerke & Antoine Gun Display Case 9 North Wabash Avenue, Chicago



Eliminates Dampness Permanently

COLLECTORS... DEALERS... SHOOTERS... NOW Can take care of Guns the Modern Way — with Electricity!

What DAMPP-CHASER Is:

- Slim metal tube enclosing sealed electric element.
- Complete with cord set, easy instructions; no extras to buy.
- Permanent. Never needs attention, refills or baking out.
- Easy to install—place on floor of cabinet or closet or fasten to gun rack.
 Inexpensive to use, only a penny a
- day to operate.
- Guaranteed by factory for 5 years.

GUN COLLECTORS

Now you can put those glass doors on your cabinet with no fear of dampness troubles—and you won't need to spend hours wiping your guns every time they're handled.

What DAMPP-CHASER Does:

- Eliminates costly dampness. Proven success—over 200,000 now in use in cabinets, closets, pianos and organs everywhere.
- Radiates continuous gentle heat safely and automatically circulates warm, dry air thru entire contents every few minutes.

OTHER IMPORTANT USES

DAMPP-CHASER also protects holsters, leather cases, wood gun stocks, fishing tackle, golf clubs, stamp collections, books, tools, clothes, shoes, belts, jewelry, silverware, pianos, organs, Radio and TV sets, musical instruments and merchandise in dealers' showcases.

Choice of 3 Sizes

Model No.	Tube Length	For Cabinet Shelf or Rack	Watts	Retail Price
16	1 ft.	14" to 25" wide	8	\$5.95
5RG	2 ft.	26" to 47" wide	15	\$6.95
7G	3 ft.	48" to 72" wide	25	\$7.95

ALL MODELS 117V AC/DC ALSO AVAILABLE FOR OTHER VOLTAGES

If space for gun storage is larger than 3'x 6' use more than one DAMPP-CHASER

SATISFACTION GUARANTEED

Your purchase price will be refunded if not satisfied after a 30 day trial.

ORDER TODAY!

a DAMPP-CHASER® to protect his guns

DAMPP-CHASER, INC.

Hendersonville, North Carolina

DAMPP-CHASER, INC., 1452 Ridgewood Blvd., Dept. 558
Hendersonville, North Carolina
Please ship DAMPP-CHASERS at once in sizes indicated:
State Quan Model Length Price \$each
State Quan Model Length Price \$each Postpoid anywhere in the world
Ship to
Address
City and State
My favorite Gus Dealer is



try GUN-LUBE-

JUST A SWIPE **KEEPS GUNS** YOUNGER .LONGER!

> Bring out the natural beauty of stock and barrel-and give your guns the best of protection - both with

one quick Silicote wiping. Heavily impregnated with wonder Silicone, this unique cloth polishes wood and metal, leaving a tough, invisible film that protects against moisture and dirt. A single wiping guards your gun throughout a wet day in the field or for a full season of storage.

Non-greasy, non-oily, Silicote's protective film won't gum or run at any temperature. Better get several since you'll find this

handy cloth a natural for your fishing tackle, golf clubs and garden tools.

Only 89c each

from your sporting goods dealer.

For better shooting, try Gun-Lube, the one lu-bricant that won't thin, melt, stiffen, or shear off — at any temper-ature or under any shooting condition. Silicote GUN.LUBE Just 49c per tube OSHKOSH, WIS.





FOR YOUR HANDGUNS

BETTER ACCURACY MORE KILLING POWER NO BARREL LEADING with

HARVEY PROT-X-BORE BULLETS

PROT-X-BORE BULLETS combine a pure lead bullet with a zinc base. Lead provides greater killing power. The zinc base keeps the barrel perfectly clean and prevents rust and corrosion. Heavier loads are possible and provide longer effective range than gas check bullets, with negligible barrel wear. Both swaged bullets and bullet casting equipment are available.

New accurate 106 Gr. .357 H.P. Varmint bullet at unheard of 1800fs., velocity energy Hand Gun Bullet Swaging dies for Pacific, Ideal Exy-Loader, R.C.B.S and Hollywood tools. For PROT-X-BORE bullets only. New Jugular Xpres jacketed .357 and .38 Special Bullet Jackets and lead wire furnished for swaging. Slug moulds also available for casting swaging cores.

Write for FREE folder and price list NOW!

LAKEVILLE ARMS COMPANY 100 HOLLEY STREET . LAKEVILLE, CONN.

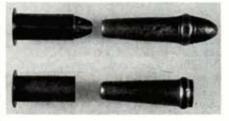


New Cartridges For Old Guns

FTER MANY DECADES new ammnui-A tion and components, factoryloaded and made, are now available for most obsolete shooting irons of Civil War vintage or earlier. The popular breechloading repeating Spencer, Sharps, the odd center-fire Maynard and other guns do not need to be relegated to the collectors shelf but with modern ammunition specially available they may be shot and enjoyed with the most modern of powder burners.

A scant couple of years ago, if anyone had foretold that metallic cartridges would again be made for the Burnside, Sharps, Maynard, Ballard, Spencer and other popular rifles of vesteryear, he would have been laughed at. Now this is an actuality, with additional calibers and types constantly being added as the demand increases.

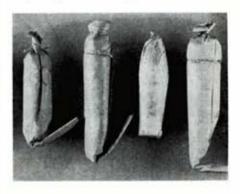
W. H. Carter of 7010 Livingston Road, Washington 22, D. C., sent us samples of the new Burnside and Maynard percussion metallic cases he



makes. They are perfect duplicates of the oddly-shaped originals, and are good for many, many reloadings with low-pressure black powder. Carter is now tooling up to produce the Spencer .52 rimfires. The last Burnside I bought cost a dollar as a collector's curiosity, but now I may start in shooting my Burnside, instead of just wishing I could shoot it! Plenty of percussion caps in large musket sizes are made by Remington and Winchester, and FFG black powder by DuPont ought to be about right. I haven't miked my Burnside barrel yet but I don't think I'll have any trouble in getting a round ball mould from Bannerman, 501 Broadway, New York, or Turner Kirkland, of Union City, Tenn.

Frank H. Miles, P.O. Box 324, Bedford, Va., sent us an assortment of sample rifle cartridge cases which he pro-

duces. He will make cases for just about any center fire caliber you may desire. The samples included cases for the .40-90-31/4 Sharps straight, .45 Sharps, .38 Maynard, .50-70 Government, and the stubby .50 Remington pistol center fire. Individually handmade, all with solid heads, these cases should be practically indestructible if used only with black powder. All cases



take standard modern primers, and reflect a high degree of workmanship. Prices vary depending on the amount of work necessary and the quantity.

Got another sample batch of modern ammo for antiques from John Barchfield, Box 507, Orinda, Calif. His specialty is paper cartridges for muzzle loaders, in all the standard sizes. If, however, you prefer loose powder and ball, Ernie Mrazz of R.1, St. Johnsville, N.Y., has that matter of supply licked. Instead of standing long hours over a hot stove running bullets, write to Ernie, His prices for .36 and .44 balls, delivered, hardly makes it worthwhile to cast your own.

So there it is—powder, lead, primers, caps, and now metallic or complete paper cartridges for long-obsolete firearms. This spirit of catering to the many black powder shooters is growing. There is even a "highly authoritative" rumor to the effect that a gun company is considering returning to production one of their Civil War models of revolvers! The times move, as the French say, but somedays I wonder in just what direction?

Rolling Block Remingtons

It is a little unusual to plug an obsolete, almost (Continued on page 72)

Warshals sporting goods co.

Order by Mail & Save . . . Money-back Guarantee

FACTORY CLOSE-OUT

Immediate Delivery

We have purchased a large quantity of COLT CHALLENGERS $(4)_2^{\prime\prime\prime}$ Bbl only) and 357 MAGNUMS (4~6~6~in,~Bbl) from the COLT Factory at a special close-out price. We are passing this special price along to our customers.



CALIBER

.357 Magnum

THE THREE-FIFTY-SEVEN

AMMUNITION: 357
Magnum; 38 Special (all types), LENGTH OF BARREL: 4" and 6", LENGTH OVERALL: 9½" with 4" barrel; 11½" with 6" barrel, WEIGHTS: 36 oz. with 4" barrel; 39 oz. with 6" barrel, WEIGHTS: ACCRO rear sight, adjustable, Quick-draw ramp type front sight, bg" wide only. TRIGGER: Grooved. HAMMER SPUR: Fast-cocking, wide spur, checkered STOCKS: full-checkered walnut, square butt. Shipping Weights: With 4" barrel: 3½ lbs.; With 6" barrel: 3½ lbs.;

Reg. \$89.50 NOW ONLY

prepaid

- DEALER INQUIRIES INVITED-

WARSHAL'S 1st & Madison, Scattle, Wash.

Ship the Coltpayment. Name:..... Address:

WARS 4, WASHINGTON













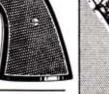
















CHRISTMAS GIFT GUNS

13 Enjoyment-Packed Issues for Only \$4.50—You Save \$2

The editors of GUNS and its entire staff join in wishing you a Merry Christmas . . . and invite you to accept this SPECIAL money-saving Christmas Gift Offer.

GUNS Magazine sells on the news stands for 50c a copy, \$6.50 for 13 months. Yet, if you return the gift coupon below within the next ten days, you'll receive the next thirteen big issues of GUNS for only \$4.50—thus saving you \$2.00 under the news stand price.

YOU TAKE NO RISK

We'll enter your subscription to start with the very next issue which comes off the press soon—but we want you to be the judge. If at any time you're not completely satisfied with GUNS—if it isn't everything we say it is—just tell us and we'll refund your money in full. Fair enough?

As a special Christmas Gift subscriber you'll save \$2.00 under the cost of single copies bought on the news stand . . . and you'll get the added convenience of having every exciting issue delivered right to your home.

BONUS FOR FAST ACTION

Act before January 1st on this SPECIAL CHRISTMAS GIFT offer and we'll send you a BONUS issue FREE! That brings your savings to \$2.50! Gives you fourteen big enjoyable issues at a cost of only 32c a copy.

SEND NO MONEY NOW-Un-

less you prefer—we'll be happy to bill you. And remember, you TAKE NO RISK since you must be delighted or you may cancel your subscription for full refund or credit. So, mail the GUNS Gift Coupon today—you haven't a thing to lose and everything to gain.

Send GUNS as a Gift ...Same \$2.00 Saving

Send GUNS Magazine every month to a friend as a Christmas gift. You get the same big saving. Just print the name of your friend or relative on the Gift Coupon. We'll send a gift card (filled out in your name) FREE!

WORTH \$2.00 IF MAILED BEFORE JANUARY 1ST

GUNS Magazine 8150 North Central Park Skokie, Illinois

I accept your generous Gift Coupon offer which saves me \$2.00 under the news stand price of GUNS.

Start my personal subscription as soon as the next copy comes off the press.

My name

City...... State.......

☐ I enclose \$4.50 for my own subscription

☐ I enclose \$4.50 for my own subsc ☐ Bill me

☐ I Gift	wa to:	nt	to		se	no	i	G	U	1	IS	C	15		0	(h	r	is	tn	no	15
Nam	е	٠.			•	•				٠	**		*	٠	•	٠	•	0				٠
Addr	ess																					
City. (I	enc	der los	sto	3n \$	4.	y 5	0	a'l	or	5	er gi	ft	s	u	g b	ifi	ri	p	ti	d)	



wastarn





MAGAZINE

THIS ISSUE...

western	
MY FAVORITE GUN	8 14
military	
WORLD'S MOST POPULAR HANDGUN	18
hunting	
QUAIL NEVER QUAIL	22
THE GUNS OF TEDDY ROOSEVELTWilliam B. Edwards	30
shooting	
ARE PISTOL CHAMPS ALCOHOLICS?	24
AMERICA'S FUSSIEST SHOOTERS	
THE TWO-GUN MAN COMES BACK	38
workshop	
WHY BULLETS MISBEHAVE Edson W. Hall	35
collector	
THE REAL TRUTH ABOUT THE KENTUCKY RIFLE Robert Kindley	40
HOW IT BEGANWebb Garrison	54
departments	
CROSSFIRE, letters to the editor	4
CUNS IN THE NEWS	6
GUN RACK H. Jay Erfurth	10
CARTRIDGES, quips, quotes, queriesStuart Miller	44
ARMS LIBRARY	47
PARTING SHOTS	74
COVER	

In his early 20's, Theodore Roosevelt sat for a series of portraits clad in frontier finery of fringed buckskin, with his elaborately engraved "Centennial Model" 1876 Win-Photo by Culver. chester across his knees.

> George E. von Rosen PUBLISHER

Ben Burns EDITOR

William B. Edwards
TECHNICAL EDITOR

Sydney Barker ART DIRECTOR

Ben Rosen ART EDITOR

Louis Satz CIRCULATION MANAGER

Marvin Ginn ADVERTISING SALES MANAGER

M. Magnusson ADVERTISING MANAGER

Tom Youngblood ADVERTISING PRODUCTION MANAGER

Eugene L. Pollock EASTERN ADVERTISING MANAGER

Ren Averill WESTERN ADVERTISING MANAGER

JAC WELLER

Editorial Advisory Board COLONEL CHARLES ASKINS STUART MILLER

H. JAY ERFURTH ROGER MARSH

ROY G. DUNLAP

GUNS magazine is published monthly at 8150 N. Central Park Avenue, Skokie, Illinois. Second class mall privileges authorized at Skokie, Illinois. SUBSCRIPTION: One year, \$5.00; single copy, \$0c. CHANGE OF ADDRESS; Four weeks' notice required on all changes; send daddress as well as new CONTRIBUTORS submitting manuscripts, photographs or drawings do so at their own risk. Material cannot be returned unless accompanied by sufficient postage. PAYMINT will be made at rates current at time of acceptance and will cover reproduction in any, or all, of GUNS magazine's domestic or foreign editions ADVERTISING RATEE will be furnished upon request.

TOOL BARGAINS

29 pc. Chrome Vanadium **Drill Set**

Sizes 1/16 to 1/2" by 64ths in plastic index. Specially made of speed drilling. Hardened and precision ground to the sharpest, longest lasting cutting edge

obtainable. Will easily cut through wood, plastic, aluminum, metal, iron and the toughest steels. Unconditionally guaranteed for thousands of drillings. Full jobbers lengths. Reg. price \$19.95, our Price

\$9.95

Also available with shanks turned down to fit all 1/4" electric drills.

DRILL—SAW—REAM—CUT all with one DRILL BIT

Convert your Drill, Drill Press, Lathe or Milling machine into a much more versatile tool. These new improved t₄ side cutting drill bits have tapered flutes for additional strength, and are made of HiGH SPEED STEEL, to insure long life, Drills own starting hole and readity cuts steel, wood, plastics, iron, aluminerules, sugarantees, etc. Size 31.2" long, 2" side cutting, t₄" Diameter.

3 Types to choose from; 1-All-purpose, 2-Wood, 3-Heavy Metal.

(3 for \$7.00)

100 Government Surplus 5" Sanding Discs.

An assoriment of Silicon Carbide, Garnet and Aluminum Oxide. 5° sanding discs from very fine to very course. Mostly cloth backed for sanding wood, from steel, glass me special promps, ecopor, to the sanding wood of the sanding wood, from steel, glass me, ecopor, bromps, etc. Less than 31½ each. This is a special close-out offer and may not be repeated again. At least a \$15.00 value.

\$3.49

36" FLEXIBLE SHAFT Now you can increase the utility of your electric drill, drill press, motor or grisder that has a shaft up to ½". Especially designed for heavy duty work in drilling, grinding, buffing, earying, sanding, polishing, engraving, etc. on wood, metals, glass, plastics etc. Designed for lifetime service, and can be operated at speeds up to 6000 RPM. If this weren't a surplus huy, it would sell for \$7.95, (add 35c for Postage and handling), our low price...



\$3.95

POWER AUGER BITS

pieces of finest to impered and hardened efficient, quick, clean, easy drilling. Will fit all electric drills. Nices %% to 2 %% Services %% for postage.)

GOVERNMENT SURPLUS 60 PC. DRILL SET

Made by CLEVELAND TWIST DRILL.

CO. Army surplus is original packing and the control of the co



\$6.95 Dept. G-1

Mathew	Day Co.,	Inc.
12 East	Madison	St.
Dumont,	New Jer	sey

ome.	.,		,				
lease	send ch	me t	he)	items Mone	checked.	į,	enclose

☐ 29 pc. Drill Set \$7.95 plus 35¢ (\$8.30)

□ 29 pc. Drill set 57.35 per 35t (\$5.35)
□ 20 pc. Turned down shanks (\$9.95)
□ Drill Reamer \$2.45 or 3 for \$7.00 ()
□ 100 Sanding Discs \$3.49 plus \$0c (\$3.99)
□ 30° Flexible Shaft \$3.95 plus 35c (\$4.30)
□ POWER AUGER BITS \$2.19 plus 10c (\$2.29)
□ 60 pc. Drill Set \$6.95 plus 40c (\$7.35)

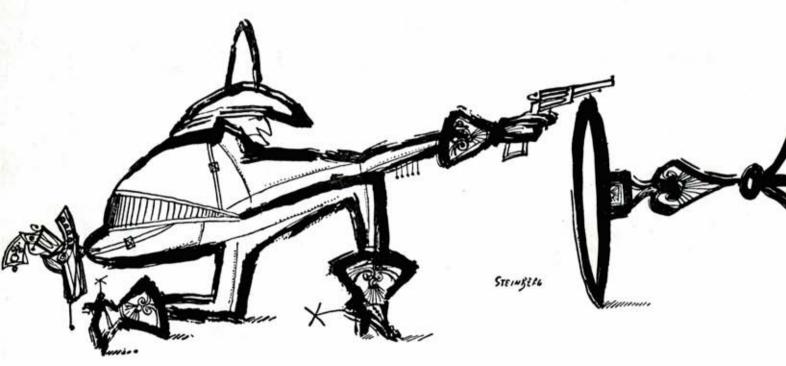
ш.	tru	Sec	*****	-	90.00	bene	40,	10.100)	
Nac	me								
	4								

City____ Zone____ State____

COULD GUNFIGHTERS REALLY SHOOT?

POOR SHOTS, SLINGING LOTS OF LEAD BUT HITTING NOTHING

By HERBERT O. BRAYER



THE WILD WEST gunfighter—was he a real man or a myth?

In this era of TV adult westerns when gunfire is heard in every living room in the land almost every night after dinner, the cowpoke with a six-shooter has become a legendary figure indeed and his prowess with a Colt Single Action is fabulous. There are some who contend that the 1956 lead-slinging sprees on television and in the movies will add up to more shooting than occurred in the bloodiest years of the Wild West. There are oldtimers who will dispute that. But in at least one aspect of television shootem-up's there is certainly a large element of accuracy. There's far more shooting than hitting.

And so it was in the old days, too.

The cowboy with the gun existed as a man, but as far as marksmanship, he was strictly a myth.

I spent three years digging into old records, archives, newspaper accounts to get the facts about cowboy gunmen and their accuracy with weapons. I talked to oldtime police, coroners, town marshalls as well as undertakers. The results do not be speak well of the cowboy as a sharpshooter either with rifle or revolver.

The best summary of just how good the average cowboy was given me by the famous old Texas cattleman, Charles Goodnight, who came right out and told me: "He couldn't hit the broadside of a barn! I've known hundreds of the best and worst cowpunchers in the business, and the number of real working cowboys who could hit a man at fifty feet with a 44 or 45 you could count on your fingers and toes! But most of them were pretty fair shots with a rifle—and some were damn good!

"The best shots in the cow country certainly were not

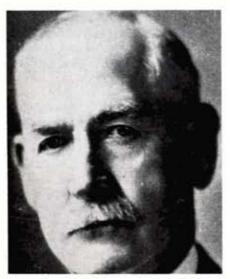


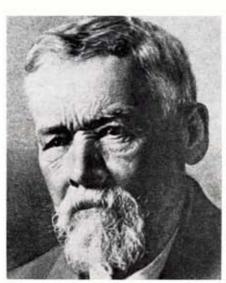
Movie star Jack Palance in "Shane" typified cold violence of gunmen but most cowboys were inaccurate shooters.

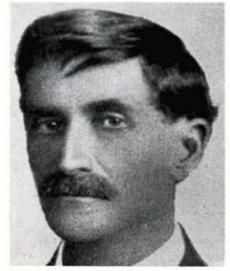
the cowboys—they were the ones who usually got shot! It was the professional gunslingers who spent their time learning to draw fast and shoot straight while the honest cowpoke was busy branding, driving up the drags, repairing fence, or busting steers out of the brush.

"If there was a gunfight in town in which someone was badly hurt or killed, you could almost bet there was a professional gunman involved, a lawman, gambler, or one of the outlaws who found safety on the frontier."

Equally positive on this score was Jim Shaw, who came up the Texas trail in '79, and became so successful that he was later elected president of the Wyoming Stock Growers Association. "I've been in every cowtown on the Chisholm, Dodge, and Northern Trails, punched cows with some of







Best gunmen in Wild West were usually sheriffs. Typical of good gunfighters were Wyatt Earp (left) and John Slaughter (center), who brought law to Tombstone in its bloody days, and Pat Garrett, who shot Billy the Kid ending manhunt.

the meanest men in the business, and had my share of gun brawls. I only knew a half dozen real cowboys who were experts with revolvers. Some outlaws and gunmen turned cowboys when necessity or a sheriff breathing down their necks demanded a change of occupation. A few cowboys turned gunmen-after all, no one ever got rich on \$30 a month! But by and large few cowboys were ever good shots with hand guns. My brother could put five out of six bullets into a playing card at fifty feet, but I've seen him miss completely against a live target at twenty-five!"

What about Wes Hardin, Billy the Kid, Jesse James, the Youngers, Clay Allison, Frank Reno and all the rest who lived in the cow country during the '70s and '80s?

"Well," continued the keen-minded cattleman, "whatever else they were, they weren't cowboys even if they did ride horseback and occasionally join a range crew. Most of those killers



Boot Hill cemetery is one of Tombstone's big tourist attractions with markers for lead-poisoning victims but actually there was far more shooting than victims.



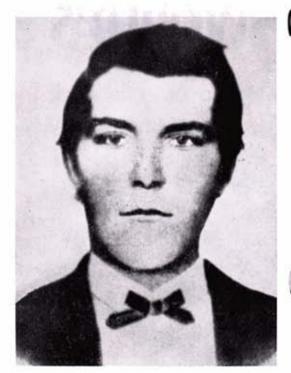
killed 23 men, but he could hardly be

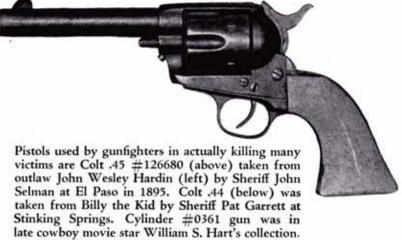
16

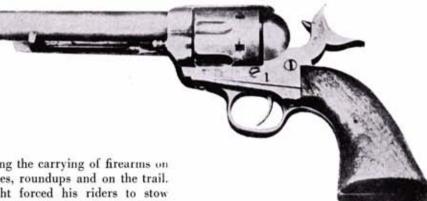
classified as a cowboy even though he did punch cows for a time with Sheriff Cape Willingham on the LX Ranch in '78.

Willingham, incidentally, soon left the unprofitable ranks of the cowmen and became a famous peace officer and a top-notch marksman. He maintained that he had little to fear from a working cowboy, and though he almost lost his life in a gunbattle with five of them. the incident does bear out the contention that the cowboys were pretty poor shots. It happened in old Tascosa. Cape got into an argument with five cowboys on the main street. When the smoke cleared, four cowboys were dead or dying, the other was permanently crippled and Sheriff Willingham was badly wounded. He recovered and later reiterated, "Generally speaking, cowboys are lousy shots."

Actually, I wondered, how many cowboys carried guns? "Depends on when you mean," Cattleman Goodnight answered. "In the late 60's and early 70's in Texas, most cowboys did and had to. It was a period of chaos in the West and on the trails. Indian raids, rustlers, crooks and land jumpers, even farmers in Missouri and Kansas banded to rob the trail herders. It was a matter of protection in a period in which there was very little law except what a man could enforce himself. Even then few cowboys became very good with a revolver. Many preferred







to ride with rifles and shotguns. The physical presence of side arms, however, made for trouble. The revolver was an 'equalizer' between the big man and the small one, between the physical coward and the brave, reckless and even bully types. Gun battles were quite common in the raw cow camps and frontier towns as a result."

But even in the 70's, according to Goodnight and other authorities, ranch owners, foremen and trail bosses were forbidding the carrying of firearms on the ranges, roundups and on the trail. Goodnight forced his riders to stow their guns in their gear in the chuckwagon. Texas Rancher John Adair as well as the Matador outfit made their riders sign agreements not to carry guns while on the job and violators were fired on the spot. The XIT Ranch enforced the ban and discharged any man who was caught with a gun on the ranch or at (Continued on page 48)

Even gunwomen are glorified by movies. Yvonne DeCarlo as Calamity Jane is far cry from real Black Hills prostitute.

Cowboys Vs. Cowboys Vs. Non-Cowboys Cowboys Shooting Cowtown Capitals Killed Wounded Incidents Killed Wounded Abilene, Kans. 143 34 Dodge City, Kans. 173 11 21 40 12 Ellsworth, Kans. 19 86 Cheyenne, Wyo. 98 18 Julesburg, Neb. 48 11 16 Ogallala, Neb. 13

BOX SCORE ON COWBOY SHOOTING

67465835685 51 67 14 26 ? 20 Newton, Kans. 76 24 Wichita, Kans. 15 Miles City, Mont. 46 53 21 Trail City, Colo. 62 16 11 Winnemucca, Nev. Las Vegas, Nev. 69 13 Tucson, Ariz. 48 22 Total 1020 266

These figures represent the highest total of shooting incidents in any single year from 1870 to 1890.

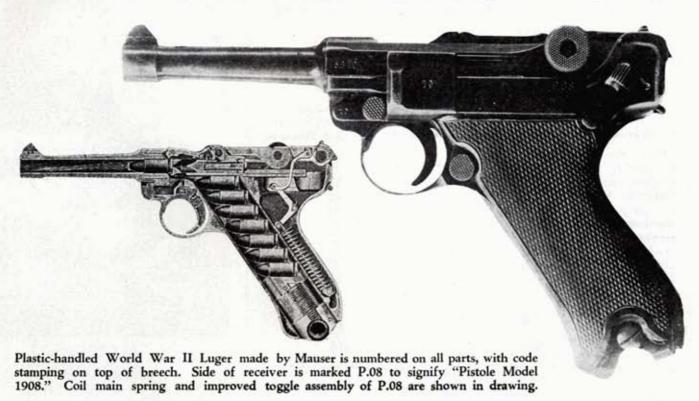


????

12 ?



German recruits at prewar pistol practice assume straight-front position, fire Lugers while wearing leather gloves.



MOST POPULAR HANDGUN

SOUVENIR OF TWO WORLD WARS, MADE IN MILLIONS IN A HUNDRED VARIATIONS, LUGER PISTOL IS STANDARD PISTOL IN MANY NATIONS

By FRED A. DATIG

FOR THREE GENERATIONS Luger has ranked foremost in the automatic pistol field in every country in the world. The story behind its phenomenal success often reads more like a novel than a technical history.

There are few people who know the strange details behind that souvenir pistol that Dad commandeered from a Nazi officer or that grandfather "removed" from the Prussian artilleryman at Verdun while serving with the A.E.F. For instance, few gun collectors realize that the Luger produced by Mauser or Krieghoff as late as 1942 remained virtually unchanged from the first models adopted by the Swiss Government in 1901. Or that in various forms and calibers it was tested on three occasions by the United States Army and came within a hair's breadth of becoming our official military sidearm on at least one of those occasions. Today the 9m/m Luger cartridge is by far the bestknown and most-widely produced handgun load in the world and may soon become the standard U.S. pistol cartridge. Strangest of all, the Luger can trace its lineage right back to Bridgeport, Connecticut, U.S.A.

Most experts agree that the Luger is a modern, up-todate pistol, although first put on the market more than half a century ago. Its "stopping power" may not be as great as that of some other pistols but its many advantages easily overshadow this and any of its other shortcomings. It has the best natural instinctive pointing of any pistol known. To illustrate this, take a Luger in hand, choose a target and with your eyes shut, aim the Luger at the target. Then open your eyes and see how nearly "on target" you are. Now repeat the same test with any other automatic pistol. The results should speak for themselves.

The Luger's assembly and disassembly are extremely simple requiring no tools. The only screws to be found merely hold the grips to the frame.

I have never seen nor heard of a single instance of a Luger "blowing up" under normal conditions and any proper cartridge, commercial or military, may be fired with absolute safety from any mechanically-checked Luger. Its overall shape, general appearance and wonderful "feel" will easily stand up in comparison with any of the latest of modern automatics.

These features are outstanding today and yet they are the same selling points which the Luger boasted when first offered on the commercial market well over 50 years ago. The last Luger to leave the assembly line at the close of World War II had not undergone the slightest change in over 35 years of manufacture! It was made without change longer than any other pistol.

Its "years ahead" design and universal popularity is shown even more clearly by the fact that it has been manufactured not only in Germany but also in England and



Gun designer Georg Luger received orders and decorations from many rulers for his one big contribution to arms design, the modified Borchardt which bears his name.



in the arm" the Luger needed, for the Dutch, Portuguese and Bulgarians were not far behind in following suit. Later, in 1907, the United States Army once again made extensive tests. However, due to many extenuating circumstances, these tests resulted in the rejection of the Luger in favor of the .45 Colt Automatic Pistol. In 1908 the German Army finally gave in and adopted the Luger as the "Pistole '08" and the 9mm

M1917 Luger with 8" barrel and drum clip is fitted with experimental hollow Mauser-type shoulder stock. Similar guns with flat stocks were issued to machine gunners.

cartridge as the "Patronen '08." It is difficult to credit the invention of the Luger to any one man. At least two persons were directly responsible and a third may well be considered indirectly responsible. It would be a simple matter to go into a long dissertation about Georg Luger, his life and times. It could be carried even further by relating the early days of New Englander Hugo Borchardt, who was responsible for putting the ideas into the head of Georg Luger in the first place. In that case, however, it might become necessary to include a discourse on Sir Hiram Maxim who, in turn, gave his recoil-operated gun ideas to the world in general and Hugo Borchardt in particular when referring to the toggle-action principle Sir Hiram first employed in his machine gun. But was Sir Hiram the first? There was the Gardner crank-operated gun before that, mechanically similar. And so on. . . .

Suffice to say that Hugo Borchardt, a naturalized American citizen, was basically responsible for the invention of the Luger in an indirect and possibly even in a direct manner. Borchardt was a mechanical genius of some note as he not only became an inventor at an early age but also developed many different types of mechanical devices.

The earliest record of Hugo Borchardt in the weapons field is taken from a letter written in his own hand to E. G. Westcott, president and treasurer of the Sharps Rifle Co. of Hartford, Connecticut dated March 18, 1875. Borchardt was applying for the position of superintendent of that company:

"I took the superintendency of a shop in the worst condition at Trenton, N. J., designed the tools and finished a contract for 5,000 guns to the entire satisfaction of (Continued on page 55)



Luger barrels and types are (left to right) post-WWI .30 commercial, 9mm dated military, .30 M1900 commercial, Navy 6" model 1904, target model with special .30 barrel, and regular M1917 for stock with 8" 9mm barrel.



I've hunted quail for years and I have to laugh when ever I think of Webster's definition of the word: "To shrink with fear." Nothing could be more at odds with overwhelming findings.

A quailing quail?—not on your life! You may rightly accuse bobwhite of tucking his head to avoid initial detection, but cowardice under fire and reluctance to gamble on new knowledge are not his weaknesses. Whether the shooting is sporadic or furious, whether pursuit is hot or downright terrifying, the little bird will hold his head high and nimble to the bitter end. I shoot, on hungered occasion, both grouse and pheasant on the ground as they skulk for cover, but not quail: for when bobwhite runs it is a retreat, never a rout. I just can't potshoot a creature which, although he plainly sees the dark steel muzzle of extermination dip to track and obliterate him, maintains great dignity all out of proportion to his small juicy size? My hunting partner Ray Bryant and I rediscovered this the day we got an advanced refresher course on bobwhite. In fact we, and three bird dogs, got about as near the full senior-grade treatment that one afternoon as I can recall. And when the last bronze of dusk brought our tired feet homeward we were all a lot smarter, happier and somehow vastly closer to the God who had made us so different from bobwhite and yet so mutually respectful of one another.

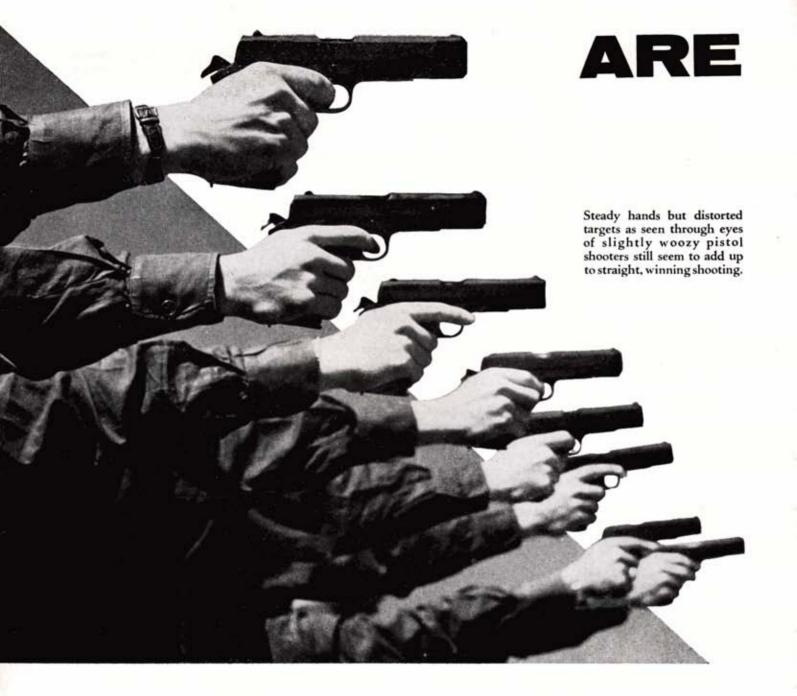
Ray is a farmer and also the county school superintendent of Colquitt County, Georgia, and whether in school administration, business or bird shooting you will not find a finer sportsman on the face of this unsporting earth. I was glad to have him along on this quail hunt that became a classic for proving what the quail can do—and what a small part luck really (Continued on page 68)



Author Gerald Hunter shows dogs the morning's bag.

Like a hand grenade with wings, tiny quail pops up before gunner. Quail is wee target in air, very hard to hit.





I HAVE SEEN pistol shooters so drunk they could not hit the ground with their hats—but brother, how they could hit the bullseye!

I have seen 'em so incandescent they could not recognize fellow team members. Yet they could hold so steady and touch off such a trigger as to hang up new national records. I've seen 'em so stiff that they had to be rolled in the watering trough where the beer was cooling. Once partially revived, lead gently to the firing line, the target pointed out, they could bang out one perfect score after another.

There's no doubt that pistol shooters are the best twofisted tipplers in organized sport. There's something about the handgunner and John Barleycorn that goes hand in hand. As a former national pistol champ, I have watched the effects of booze on my opponents on the range and I must say they are remarkable.

While there are a few old grannies who constitute the male auxiliary of the WCTU and abhor the Demon Rum, most handgunners would no more consider journeying to a powder-burning competition without their flagons than they'd push off without the battery of shooting irons.

In some ways there is a tradition for mixing whiskey and gunpowder. Buffalo Bill in his prime insisted on having no less than ten tumblers of stout whiskey a day to "keep his kidneys functioning properly." Calamity Jane in her heydey in the Black Hills is reported to have had a daily intake of two quarts of 100 proof daily.

These days many pious comments are passed among the brethren about such imbibing habits. One of the first questions usually heard at the first pistol rally in the spring is: "Hi, Bill. You shootin' dry this year?" By "dry" is intended to say are you joining the minority and attempting to perform without the crutch of John Barleycorn.

Marksmen are prone to proclaim loudly that they never touch a drop. A quarter of an hour later one of these gents will be surreptitiously nursing a bottle of Old Grandad, diligently striving to achieve just that proper edge before he essays the first firing order.

FORMER NATIONAL PISTOL CHAMP FINDS THAT MOST HANDGUNNERS SHOOT BETTER WHEN FORTIFIED WITH HALF-DOZEN SHOTS OF WHISKEY

By COLONEL CHARLES ASKINS

This imbibing is a trade secret. Maybe that's why, outside the handgunning clan, the fine and high state of inebriation which is part and parcel of all sixgun rallies is so little known.

Twenty years ago or thereabouts, we were all struggling to win pistol tourneys. We didn't shoot good scores in those days. Our totals were easily 20 points under what is fired nowadays. Suddenly from out of the Far West marched a gent who pinned back the ears on all of us. He was deadly, cool, machine-like and consistent about his winning. If he entered a match, he wiped everybody's eye. If the wind blew a gale, if the sun reached 120 degrees, if it rained or snowed, or sleeted, it mattered not. This automaton was unbeatable.

One day the great champion fell on the greensward. It appeared to be a stroke. He was comparatively young, husky, in the pink of condition it seemed. What had struck him down? A doctor was hastily summoned and a hurried examination ensued. Shooters removed their hats. It looked

like maybe the passing of the colossus of the handgunning world.

The doctor arose from his probings. "Gentlemen," he'd evidently seen the hats doffed and thought this was a gesture in his direction. "Gentlemen," he addressed the crowd, "there's nothing wrong with this man except he is filled with what I'd estimate to be about a quart of Old Crow. In other words he's boiled, stiff, loaded, full, inebriated. Pour him very gently in the shade for a couple of hours and he'll be okay."

A great light dawned.

Literally from that day forward the pistol line has been tainted with those insidious fumes which emanate from the little brown jug. Depending on the locale, the cup that cheers may be handily arranged alongside the sixshooter. It may be secreted in the trunk compartment of the family car which is parked nearby. Or, perforce, it may be ordered up right over the clubhouse bar. Speaking generally the farther east you travel the more it is kept under wraps.

In the West I have seen a galvanized horse tank conveniently arranged behind the firing line where not only could the handgunner drink all the free beer he could hold, but if the mood was upon him he was at liberty to climb into the cooling waters and knock off a couple of bottles as he soaked. When next his turn came to shoot, he was encouraged to tote a stein or two onto the firing line.

Eastward this is frowned upon. And while just as much shot-group tightener is permitted to trickle where it will do the most good, the imbibing is more surreptitiously accomplished.

Do handgunners get loaded to be social? Or just because it is good, clean fun to be out with the boys and why not a convivial nip? Or does alcohol deaden the report of the loudly-exploding fulminate, take the sting out of the recoil? Just what is behind this tippling of the fraternity?

Pistol marksmen suffer from buck fever.

The deer hunter when stalking the wary whitetail—especially if he be a tyro at the gentle art—gets what is called would let him fight Madrid bulls with a switchblade knife, has a trigger let-off that is little short of perfection, a sense of timing that is sheer magic—and who the hell has got the buck?

The outcome is never in doubt. He shoots up to his practice totals and more often exceeds 'em. As a result he gets in the win column, soon becomes a champion, hangs up new records—and never fails thereafter to attend all pistol tourneys with his own particular brand of pain killer.

Some cap-busters swear by straight whisky; others dilute the libation a trifle with branch water or soda. Then there's them who swear by wine, beer, and god only knows what else. A very good friend of mine carefully concocts a harmless gallon or two of vodka, gin, tequilla, white wine and Louisiana hot sauce, and he says it is the stuff!

The active part of the handgunner's season is during the summer and beer is a natural for those sweltering bangfests when the temperature ranges in the high 90s, and the humidity is running neck and neck.



Mixture of pistol powder and whiskey as often seen in many a movie western is also found at many pistol shooting matches.

buck ague when the game is finally under his gun muzzle. He cannot hold the rifle steady, his hands shake, his knees tremble, his eye mists over. Authentic cases are on record where the huntsman has raised his weapon, ejected every shell from the magazine and never once pressed the trigger. It is a malady as old as hunting. The pistol competition shooter is similarily effected.

During shooting rounds on his own dunghill he is never threatened. But just let him visit a shoulder-to-shoulder powder burning and he is immediately in trouble. His hand shakes, his trigger coordination is gone, his knees fill with water, his aim is atrocious, and the final outcome is a score 25 per cent under practice totals.

But with a few judicious highballs what happens? With the first one the shaky pistoleer sees the array of pistol champions on either flank—hombres whom he knows hold half the records in the book and can wallop him with a borrowed gun and strange reloads. After two highballs he growls, "Well, maybe the varmints can take me but they damned well got to do it."

With three highballs he marches up to the firing line, as unconscious of the topnotchers to either flank as though they were all in Albuquerque. He is as good a marksman as anyone there and he'll show 'em.

With a half-dozen shots of that 100-proof trickling around inside, our hero finds he has suddenly achieved a concentration he never dreamed of, has a confidence that Unquestionably the most amusing angle concerning the drinking habits of our handgunning clan is the widely professed abhorrence for the poor weakling who would stoop to enlisting John Barleycorn as an ally. I have listened to gunners brand a fellow as a bottle man when at the moment they were in process of consuming not less than a half-pint every hour. A minority of the crew are teetotalers and they persuade the weaker brethren of their point of view.

Alcohol judiciously consumed will improve the marksmanship of about nine out of ten gunners, I can testify from observation of pistol meets. The tenth triggerman gets no beneficial effects from the stimulant. He learns this after considerable experimentation. Once decided that the bourbon is not going to sooth his jangled ganglions, he, more often than not, constitutes himself an anvil chorus to berate those cannoneers who can get a buzz on and enjoy their handgunning while working at it at target ranges anywhere in the country.

There is supposed to be something immoral about taking a drink before entering a shooting match. It isn't quite as bad as being accused of smoking marijuana, gulping goof balls, or being on the needle but the condemnation is there just the same.

Of course, you can slug down four highballs before dinner, and 16 afterward at a cocktail party, and you can go fishing and get as stiff as a skid (Continued on page 63)

AMERICA'S FUSSIEST SHOOTERS



Special stock and heavy precision barrel are used on competitive bench rifle by custom builder Clair Taylor of Rixford, Pa.

BENCH REST SHOOTING COMBINES

MOST INTRICATE EQUIPMENT WITH

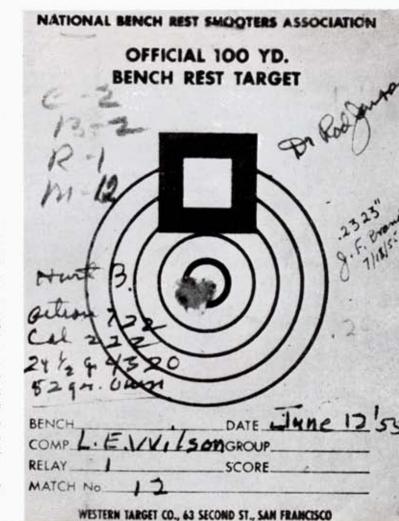
SIMPLEST OF PRINCIPLES—HITTING

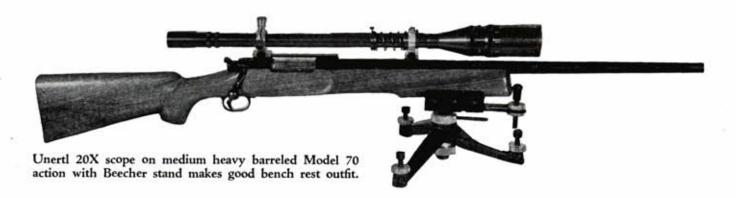
TARGET IN SAME SPOT CONTINUALLY

By H. JAY ERFURTH

 ${f T}_{
m target}$ paper, yet they don't even have to hit the target to win! Their rifles weigh upwards of 17 pounds on an average and are as securely settled as a cannon, yet the most important single element of the whole shooting match is a flimsy moving strip of paper where their hits are registered. A look at the loading paraphernalia inside a shooter's station wagon is like a quick tour of an Oak Ridge laboratory, yet the game is so simple even a kid can play-and with top success. They've been called America's fussiest shooters, yet now standard factory guns are being used in matches, and one of the most precise cartridges yet developed for their work came straight out of a green and white Remington package, the .222. These gunners are the bench rest shooters, striving for the ultimate in accuracy, a one-hole shot group at umpteen hundred yards.

Bench rest record for 10 shots measures .2323" across.







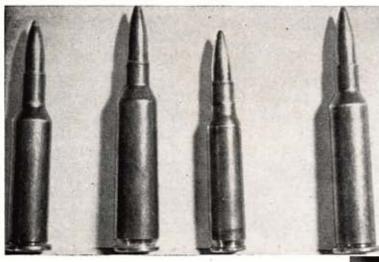
First they were happy at 100 yards. Then ammo developments, sparked largely by their demands, stretched the limits much farther. In a sense, because of their demands for better ammo never has the whole shooting industry owed so much to so few. But the idea that the bench rest shooters are a select group is one that most of them would be the first to deny. A look at a firing line any weekend would show you why. Doctor, lawyer, merchant, police chief, they're all there, with a few ladies, and an ever-increasing group of younger shooters who are putting the oldsters through hoops.

At the DuBois, Pennsylvania, matches of the National Bench Rest Shooters Association last year, 19-year-old Wally Hart put 10 bullets into a target 100 yards off making a single hole which center to center measured a trifle more than the diameter of the bullet he was shooting: target hole, .2177 of an inch! In a Washington match last June, 12-year-old Larry Pride (height 5'2", weight 120 pounds) made the smallest group of the day at 200 yards, winning the only 5-shot 200-yard match.

As an example of the way bench rest shooting is sweeping the country, it might be an idea to take another look at this

Carefully loading ammo at auto trunk for their turns at the square bullseyes at Custer, S. D., meet are (l. to r.) Ed McNally, NBRSA president; Mike Walker, past president; and Frank Hubbard, who runs Johnstown, N. Y. matches.





Most popular bench rest loads currently are (l. to r.) .219 Don, 22-250, .222 Remington and .219 Improved Zipper.

Pride kid. He has an advantage: his father is Ralph Pride, the custom barrel maker and gunsmith of Portland, but nothing says rifle shooting skill is inherited; no, this kid has what it takes. He was the only shooter under 20 years of age among 17 competitors, some of whom held world's records. During two months prior to the match he had fired some 350 rounds while being carefully coached by his father. In all before the match he had fired well under 500 shots.

The equipment Larry Pride used was typical of bench rest outfits: only the best to achieve the best in accuracy. The rifle was a .219 Donaldson Wasp with a Pride stainless barrel on the original pilot model Weber bench rest action, a special single shot action of unusual stiffness. Stocked by Ralph Pride with a bulky slab of wood, the 19½-pound rifle was about as unlike an ordinary hunting rifle as you could imagine, and still have it resemble a gun. The 30-inch barrel measuring nearly an inch and a half diameter at the breech—1.35"—tapering a trifle to 1.3" at the muzzle made it look more like a gas-pipe than a rifle.

Topping the rifle was a 30-power Lyman Super Targetspot with a long sunshade extending almost to the length of the muzzle. The gun rested in a special pedestal of Pride's own design, which permits positive mechanical elevation of the rifle while aiming. At the time of the Washington shoot, 2050 shots had rolled at pretty hot speed down that long barrel, and the gun had not been changed in any way for Larry Pride to shoot it. The load he used was 25 grains of 4895 pushing along a 55-grain Sierra Semi-Pointed bullet—fresh stock, right from the jobber.

Not all bench rest shooters can have the advantage of such a good coach as Ralph Pride at their elbows, but they can have top equipment, for in their equipment lies half the battle of bench rest competition.

A bench rest rifle starts out looking pretty common. Doggy GI Mausers and battle-worn Springfields are frequently used as the basic ingredient. Then along comes the first fancy work—a barrel rifled to precision so fine that such barrels can never become ordinary production goods—tolerances are virtually zero. All dimensions must be right on the button. After all, when bullet dispersion at 100 yards up to 300 meters will be measured in tens of thousandths of an inch, you can't have sloppy work at the shooting iron end. (Continued on page 52)



Larry Pride, age 12, demonstrates concentration needed in aiming for record groups which are goal of bench resters.

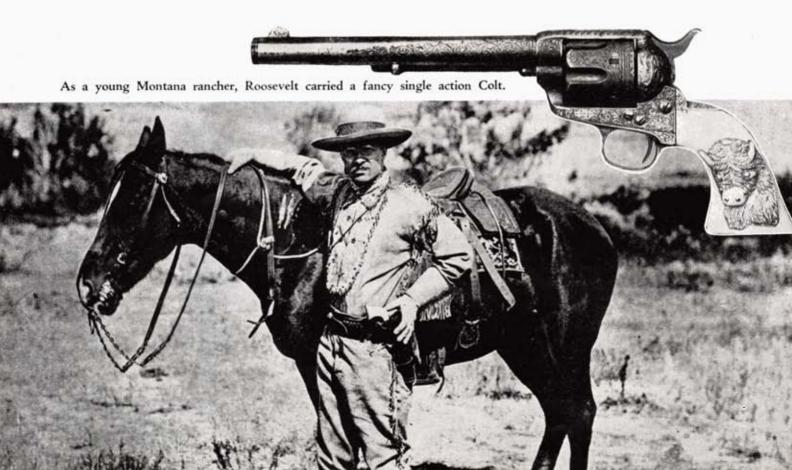
National champ Sam Clark loads rebarreled Model 70 which is mounted in "Universal Bedding Clamp" bolted to stock.





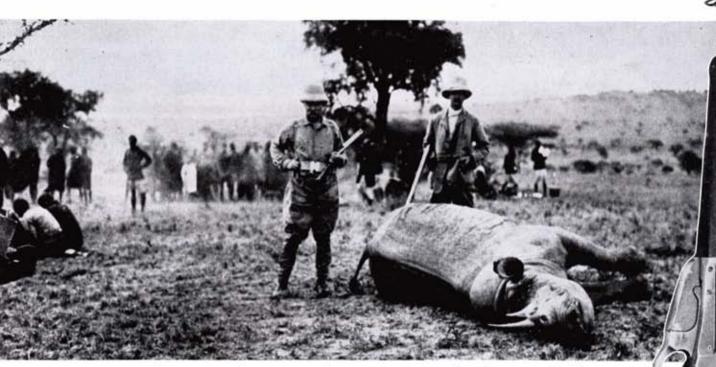
With his Holland & Holland #19109, Roosevelt stands by elephant which fell to his shots during 1909 trip to Africa.

THE GUNS OF TEDDY ROOSEVELT





By WILLIAM B. EDWARDS



T.R. shot much big game in Africa with Winchester .405, serial number #63736, a Model 1895.

66 THE RANCHMAN owes to his rifle not only the keen pleasure and strong excitement of the chase, but also much of his bodily comfort; for, save for his prowess as a hunter and his skill as a marksman with this, his favorite weapon, he would almost always be sadly stinted for fresh meat. Now that the buffalo have gone, and the Sharps rifle by which they were destroyed is also gone, almost all ranchmen use some form of repeater. Personally I prefer the Winchester, using the new model, with a 45-caliber bullet of 300 grains, backed by 90 grains of powder, or else falling back on my faithful old standby, the 45-75. But the truth is that all good modern rifles are efficient weapons; it is the man behind the gun that makes the

difference. An inch or two in trajectory or a second or two in rapidity of fire is as nothing compared to sureness of eye and steadiness of hand."

Basic truths these were when Theodore Roosevelt first expressed them back in the 1880's, and equally true they are today. The record of big game brought down by Roosevelt during the years he spent meathunting to supply his ranch and on the African veldt gathering museum specimens proved that he was a good "man behind a gun."

Over the years Roosevelt acquired quite a few rifles and shotguns but he was no collector to statistically cherish relics of some bygone era but an active hunter and outdoorsman who selected his battery care-



Roosevelt as a sheriff used shotgun to capture thieves who stole his boat from his Elkhorn Ranch on Little Missouri River.

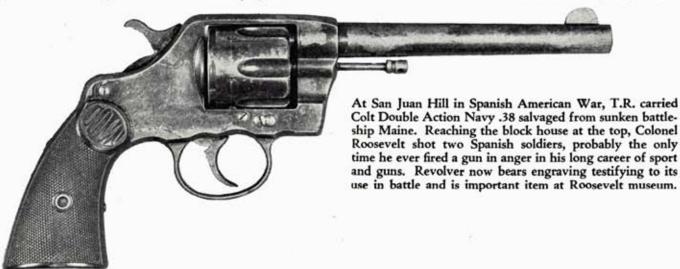
fully with an eye to use. Without doubt he was the "shootingest" President America ever had and handled guns more than any other U.S. chief executive.

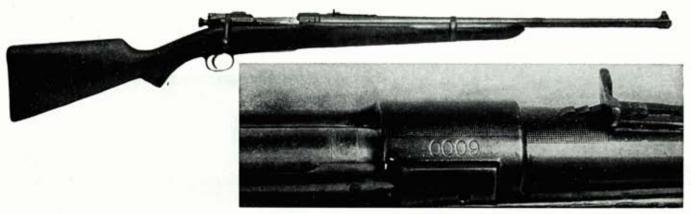
T.R. in his days as a rancher used a six-shot .50-115 Bullard lever-action repeater, but he soon turned to the more reliable Winchester Model 1876, "Centennial Model" in .45-75, of which his rifle was one of the finest examples ever turned out. Presented to him by the Boone and Crockett Club, of which he was a founder, the '76 was a shotgun butt half-magazine rifle with the rare pistol grip and curved lever. Though it is an engraved rifle, Roosevelt found it always handy and very frequently used it for hunting to good effect, proving that a fine gun can be used without destroying its finish, if care is taken.

One of the most unorthodox uses for a hunting rifle occurred when Roosevelt and his Bullard captured three thieves and eventually conveyed them to the sheriff and prison. Roosevelt got for his labors as deputy sheriff the magnificent sum of \$50, fees for arrest, and "mileage" for his travels of 300 miles in bitter icy March weather along the Little Missouri River.

The three men had stolen Roosevelt's boat, and he with two of his ranch hands, Seawall and Dow, who originally had been Maine woodsmen, knocked together a boat and set out after the bandits. These unsavory characters comprised a man named Finnigan who had a reputation as a troublemaker, a frontier type with shoulder-length red hair. With him was a halfbreed and an old German.

After great privation and in severe cold "sheriff" Roosevelt caught up with the German alone by the campfire, his two companions some distance away. Quickly all three were rounded up and disarmed, and for a number of days Roosevelt, Dow and Seawall alternated in standing guard, with Winchester, Bullard and double shotgun ready. "For this night watching we always used the double barrel with buckshot, as a rifle is uncertain in the dark; while with a





Favorite of T.R. for African and South American hunting was his Springfield sporter #9 in .30-06 caliber built to his order in 1903 by the U.S. Armory.

Winchester .45-90 Model 1886 stocked Roosevelt-style was used by him for deer, elk, bear and mountain goats.

shotgun at such a distance and with men lying down, a person who is watchful may be sure that they cannot get up, no matter how quick they are, without being riddled."

The future President was quite a camera bug, preserving his adventures for posterity. Both he with his two men, and himself with the "drop" on the three bandits, were photographed for the future. More amusing, during this time he diverted himself and helped keep awake on guard by reading Leo Tolstoy's "Anna Karenina," which handy tome he had forethought to bring with him.

Frequently Roosevelt carried a handsome Single Action Colt "Peacemaker" covered with magnificent scroll and vine engraving with his initials on the left breach and the head of a buffalo carved on the ivory grips. He affected the cross draw, wearing the revolver, butt first, on his left side. For real shooting, his half-magazine Model 1886 Winchester 45-90 took top honors during his frontier days, accounting for goats, sheep, antelope and many other animals. With his older '76, T.R. took everything up to



Cargo of Roosevelt's rifles and ammo built by Winchester for his African hunt was photographed as the load was being carted from factory to railroad.

Highly prized by Roosevelt and often used for hunting was his deluxe Model 1876 .45-75 that brought down many big horn sheep on his western ranch.

WASHINGTON

Personal

November 17, 1903.

Dear General Crosters

I have sent you over my Winchester rifle, so that you may have one of the new Springfield carbines made like it for me. I want the sights reproduced exactly. If necessary they can be obtained from the Winchester Company.

I want the butt just like my present butt, only one inch shorter.

With great regard,

Sincerely yours,

Theodore Roscrell

Brig. Gen. William Crozier, U.S.A., Chief of Ordnamce, War Department.

As Chief Executive, T.R. ordered guns from shop facilities of Springfield Armory which made rifles to his wishes.



Teddy and son Kermit with justifiable pride sit on record Cape buffalo downed as it charged them on African safari.



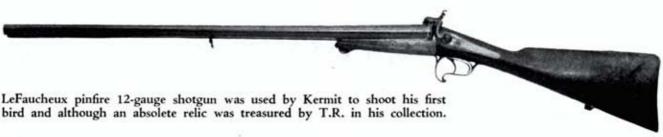
Roosevelt's love of guns and shooting made many foreign friends give him gifts like William Greener duelling set.

and including grizzly bears. Most of T.R.'s shooting was hunting for survival, and although he appreciated the magnificence of a trophy rack his "Elkhorn" ranch was not named because he was a promiscuous trophy-butcher.

Affairs in public life in the late 90's kept him from his beloved prairies, but T.R. managed to get in a little shooting in '98. He wore a .38 Colt New Navy revolver which had been salvaged from the U.S.S. Maine, and shot several Spanish soldiers at San Juan Hill with it. As colonel commanding the 1st Regiment U.S. Volunteeer Cavalry, his "Rough Riders," Teddy Roosevelt led as rough and tough a bunch of horse soldiers as ever forked a bronc. Though they walked and ran up the slopes at San Juan, their horses held at the wharf, the Rough Riders' armament reflected Roosevelt's ideas on modern weapons. Their battery of two Colt M1895 Browning "potato digger" machine guns in .30-40 caliber were valuable support weapons when the cavalry had to work as infantry, dismounted.

While most of the volunteers in the Spanish American War were armed with the older M1873 flip-up breech Springfields, T.R. made sure that his boys had the very best, and managed to obtain an issue of brand new Krag bolt action repeating carbines for his men. One of the Rough Riders, Bob Wrenn, arrived in Cuba too late to get a Krag, and Roosevelt let him have the Model 95 Winchester lever-action carbine in .30-40 caliber which Teddy had used as his personal military gun.

As governor of New York, fol- (Continued on page 60)



WHY BULLETS MISBEHAVE

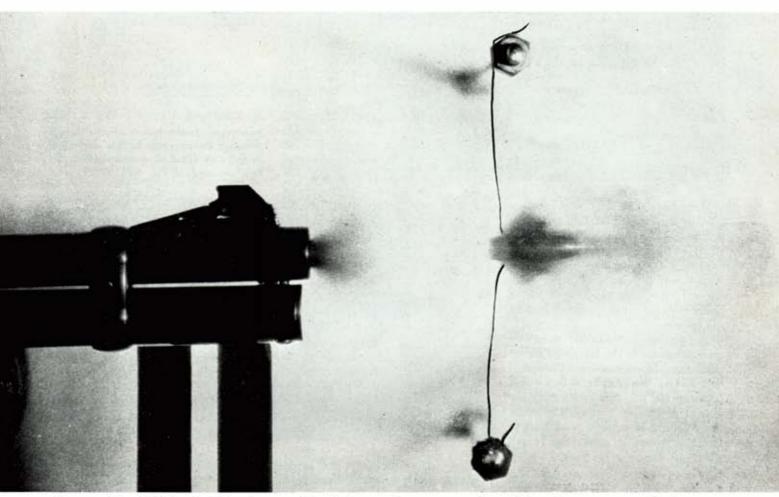


Photo studies of bullets in flight give researchers facts on why ammo sometimes behaves in strange ways. By fast camera action effects of various factors on trajectory can be closely observed by ammo designers and manufacturers in the lab.

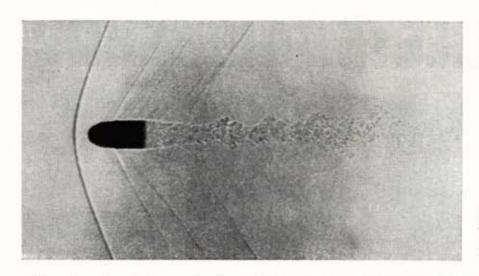
SEEMINGLY ERRATIC BEHAVIOR OF BULLETS IN FLIGHT STYMIES MANY RIFLE SHOOTERS BUT CAN BE EASILY UNDERSTOOD BY FOLLOWING PHYSICAL LAWS

By EDSON W. HALL

WHAT GOES UP must come down. Gravity made these arrangements a long time ago. Everything traveling through space, such as a bullet, not under constant power of being forced upwards by air currents, must fall to the earth. The faster, heavier, and more streamlined the bullet is, the further it will travel before coming to rest on terra firma. And the flatter will be the trajectory if it has greater speed and weight.

Trajectory is the curved path of a bullet from its source of propulsive force to wherever it comes to rest. This curve changes with the range, the bullet weight, diameter, shape, and velocity. It changes with atmospheric conditions such as temperature, pressure, humidity and wind. There really is nothing mysterious about it, although one hears all sorts of explanations.

Cartridge	Grain Weight		ted for 50	
22 Short (standard velocity)	29	9.5		
.22 Short (high velocity)	29	7.0	31.0	67.0
22 Long (standard velocity)	29	8.0		
22 Long (high velocity)	29	5.5	24.5	54.0
.22 Long-Rifle (standard velocit	y) 40	6.5		
22 Long-Rifle (high velocity)	40	5.0	24.0	50.5
22 W.R.F. (standard velocity)	45	6.5		
22 W.R.F. (high velocity)	45	5.0	22.5	46.0
.22 Automatic	45	8.0		
25 Stevens	65	6.0		



Spark photo of .22 bullet at speed slower than sound shows heavy air compression waves which build up at bullet nose and eddy currents behind.

Supersonic bullet has crashed through pressure barrier and is less disturbed in flight by front air resistance but turbulence and shock still affect rear.

Many have the mistaken notion that a bullet travels in a straight line for a certain distance after leaving the muzzle, this distance varying with the power of the gun. This, they think, is what is spoken of as point-blank range. Others will even have you believe that a bullet rises for a distance after leaving the muzzle.

The probable reason for these two misconceptions is the failure to distinguish the difference between the line of bore and the line of sight. If they would just stop and consider how utterly impossible it is to lick gravity, they would understand that a bullet must start to fall the instant it leaves the barrel, where gravitation takes over.

Line of sight is a direct line from the eye, through both the rear and front sight, to the target.

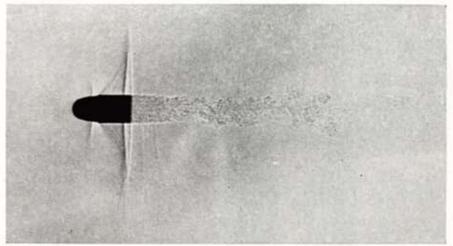
Line of bore is a direct line from the cartridge in the chamber, through the bore to infinity.

These two lines are never exactly parallel to each other.

Here is what happens when we sight in a gun for a given distance. We raise the rear sight until by test shooting we have the bullets striking in the center of the target. Our line of sight is still a direct line from the eye, through both the rear and front sight, to the target. But if we look through the bore we find that the line of bore is aimed above the target.

This is to take care of bullet drop caused by gravity. The amount of this drop, and the discrepancy between the line of sight and the line of bore, varies with the distance from gun to target, bullet velocity, its shape and weight.

The bullet does rise above the line of sight. It has to (except at absurdly short distances), but it does not and can not rise above the line of bore. The line of bore controls the line of de-



parture of the bullet from gun muzzle to target, and we control the line of bore with the line of sight.

The line of bore starts the bullet on its way toward the target with just the right amount of angle above the line of sight to compensate for the bullet's drop, caused by gravity.

For use in ballistic tables it is common practice to take the height of trajectory (height above line of sight) at half way from gun muzzle to target, and this is called mid-range trajectory.

The extreme height of trajectory, however, is not at this point, but at approximately three-fifths to two-thirds the distance from gun to target, again depending on bullet weight, shape, velocity and, of course, range.

The longer a bullet is in the air the slower it travels, due to air pressure; and the slower it travels the faster is its rate of fall in relation to its feetper-second of forward movement. Consequently the angle of fall below the line of bore is very slight near the muzzle, but increases as the range increases.

As an example of bullet movement, the maximum ordinate (extreme height of trajectory) when firing at 1000 yards with the military .30-'06 cartridge, using the M-1 load which was used by our government from 1925 to 1940 (and which was the best cartridge, incidentally, of any this country has ever used) was 10.5 feet above the line of sight. Firing the same cartridge at 200 yards, the maximum ordinate is but 0.28 feet. The 1000 yard figure for the same cartridge, when using the load we had in World War I, was 15.2 feet. I do not have the figures for the present M-2 load, which

WIND DEFLECTION IN INCHES

		Miles per hour	3 & 9 o'clock winds
.22 Long-Rifle Standard	50 yds.	5 10 15 20	0.7 1.3 1.9 2.6
Velocity	100 yds.	5 10 15 20	2.2 4.4 6.6 8.8
.22 Long-Rifle	50 yds.	5 10 15 20	0.8 1.6 2.4 3.2
High Velocity	100 yds.	5 10 15 20	3.0 6.0 9.0 12.0

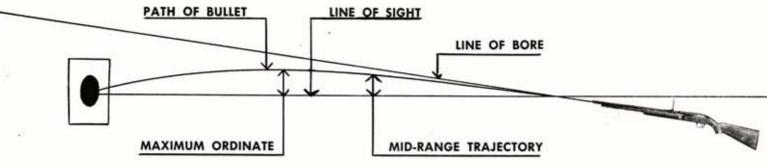


Chart shows difference between trajectory and line of sight which intersect near muzzle and reconverge at target.

was used in the second world conflict, and of course Korea. But it is roughly the same as that used in the first except that the velocity was upped a bit, which would lower the figure to probably 14 feet. These figures, remember, are the maximum number of feet the bullet was above the line of sight and not above the line of bore.

Wind is another of the elements which a bullet must fight in its flight from here to out yonder. Few, other than some military personnel and target shooters, really have any conception of how great a side push wind gives a projectile. At the shorter ranges, with fast, powerful cartridges, the effect is little. But with the lower-powered cartridges, or the larger ones at long range, the pushover is very great indeed.

Wind direction is usually specified in terms of an imaginary clock lying face up on the ground. Picture yourself standing in the center where the hands are connected. The direction you are shooting would be twelve o'clock; and a wind coming toward your face would be a twelve o'clock wind. One coming from behind would be 6 o'clock. One directly from the left is 9 o'clock, etc.

One time at the National Matches I was shooting in a 1000-yard match. with about a 20-mile wind coming in at 9 o'clock (90 degrees to the left of the path of the bullet). I was using the very fine (especially for wind-bucking quality) M-1 ammunition already described, and had the sights set for 41/4 points (17 minutes of angle) of left windage. In other words, the wind was blowing the bullet 170 inches (slightly over 14 feet) at this range. Sounds incredible, doesn't it? But one seldom shoots at the long ranges without having some wind correction to make. When the wind is fish-tailing (first blowing from one side and then the other), one will often fire a shot

with perhaps 2 points of left and then the very next shot will require that much of right windage.

The little .22 long-rifle cartridge, so popular for everyday chores, takes an awful beating. Even if there is but enough breeze to blow out a match, the little slug gets booted around a lot.

For instance, with the .22 long-rifle high velocity in a side wind of only ten miles an hour, the shove-over at 50 yards is 1.6 inches. Backing to 100 yards it amounts to 6 inches. In a good stiff breeze of 20 miles an hour the push is 12 inches at 100 yards. So before you take shots at these ranges you had best stop and figure holdover.

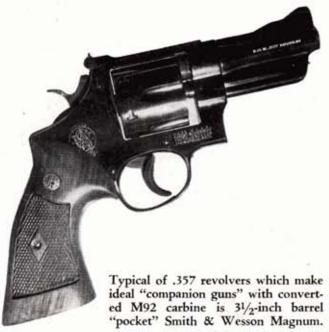
Right here is a good time to mention that the .22 standard velocity cartridge is deflected less by wind than is the slightly faster high velocity type. This queer ballistic (Continued on page 65)

	TRA.	JECTORY	TABI	LE F	OR CEN	TERFIRE	CARTRIDGES				
Cartridge	B	ullet		Pati	of Bulle	t above	or below line o	1 .	ight	inche	e)
100	Type	Weight		50	100	200	300	ं	400	mene	500
200000		grains		ds.	yds.	yds.	yds.		vds.		vds.
.218 Bee	HP	46	a	0.7	0	b 7.3	b 27 7		400.		y w.y.
219 Zipper	HP	56	24.24		a 3.8	. 0	b 16.8				
217 Lipper	ine.	20	a	0.6	a 2.9	b 5.8	b 22 7 b 12.0				
22 Hornet	SP	45		0.8	0	b 8.7	b 12.0 b 32.3				
220 Swift	**	40	- 33		a 4.3	0	b 19.3				
ZZU SWITT	SP	48	a	0.3	a 1.5	ь 3.0	b 9.7 b 6.0	b	19.5		50.5
222 Rem.	SP	50	a	0.5	0	b 4.9	b 17.5	ь	42.0		84.5
25-35	SP	117			a 2.5	. 0	b 1C.0	ь	32.0	ь	72.5
250-3000 Sav.	PE	100		0.6	0	b 7.5 b 4.5	b 29.5		30 5		
257 Roberts	PE	100		0.6	ŏ	b 3.5	b 16.0 b 15.0	b	38.5	b	73.5
	HP			(M. SM.)	a 2.8	0	b 10.1		30.0		70.0
.270 Win.	PE	130		0.5	0	b 3.5	b 12.5	ь	30.0	b	54.5
.270 Win.	cen	100	200-0		a 2.0	0	b 7.5	ь	23.0	ь	46.0
2/U Win.	SP	150	a	0.6	a 2.6	b 4.5	ь 18.0	ь	44.0	b	86.5
30-30, .30 Rem	SP	170		1.0	0	b 7.5	b 11.0 b 28.0	ь	33.5	b	72.5
300 Sav.	SP	150		0.7	ŏ	b 4.5	b 17.5	b	41.5	b	79.5
	333				a 3.0	0	ь 11.0	b	32.0	b	67.0
303 Sav.	SP	190		1.5	0	b 7.5	ь 35.0				
30-40 Krag	PE	180	a	0.8	. 3.5	b 4.5	b 19.5	h	46.0	ь	87.0
30-40 Krag	SP	220		10	a 3.5	6 7.0	b 11.5 b 27.0	Ь	35.0 65.5	b	73.0
30-'06	PE	150		0.5	Ö	b 3.5	b 14.0	ь	35.0	Ь	
		200			a 2.5	0	b 9.0	ь	25.0	ь	53.0
.30-'06	PE	180	A	06	0	b 4.5	b 16.5	ь	38.0	ь	71.5
30-'06	SP	220		0.8	a 3 0	b 5.5	b 9.5 b 22.0	b	28.0 52.0	b	59.0
30-00	36	220		0.0	a 3.5	0 3.3	b 13.5	6	36.5	b	87.0
300 HGH Mag.	HP	180	a	0.5	0	b 4.5	b 15.0	ь	38.0	ь	
	222	***		idi	# 2.5	0	b 9.5	ь	29.5	ь	65.0
.300 HGH Mag.	SP	220		0.7	0	b 4.5	ь 18.0	ь	44.5	b	
308 Win.	51	150		0.6	a 3.0	b 5.0	b 11.0 b 16.0	b	34.5	b	
			- 1	0.0	a 2.7	0	b 9.0	B	26.5	b	68.0 55.0
.308 Win.	ST	180	a	0.7	0	b 6.0	b 19.5	ь	41.0	ь	76.0
22 115- 5-1	SP				a 3.0	0	b 11.0	b	30.0	b	61.0
.32 Win, Spl. .348 Win.	SP	170 200		0.8	0	b 7.5 b 6.5	b 23.5	10.0		- 200	
310 1111.	31	200		0.0	a 3.8	0.5	b 24.0 b 16.0	b	73.0 58.5	b	147.
348 Win.	ST	250	a	0.9	0	b 6.5	b 26.5	ь	66.5	6	132
.35 Rem.	SP	200		1.1	0	b 8.5	b 32.0				
351 Win. S.L.	SP	180		1.5	0	b 12,5		63	1004100		
375 HGH Mag	26	270	A	0.7	a 2.9	b 4.5	b 17.5 b 10.3	b	41.5		82.5
375 HGH Mag.	ST	300		0.7	0	b 6.5	b 21.3	b	28.5	b	57.3 82.0
	1	55.05			a 3.3	0	b 11.6	ь	32.4	b	65.8
.405 Win.	SP	300		1.0	0	b 7.0	b 31.0	27		100	
7 x 57 m/m	SP	175		0.8	a 3.5	b 5.5	b 22.0	b	52.0	ь	100.
8 x 57 m/m	SP	170	a	8.0	0.5	b 5.5	b 13.0 b 23.0	Ь	41.0 58.0	b	76.0
			Ex	plana	tion of Sy		V-10-240-X11	~	- Access		
"a" = 4	bove li	ne of sight:			soft-poi		HP = I	llor	ow po	int:	
		ne of sight:			pointed			il.	- 41-		

THE TWO-GUN MAN COMES BACK

REVOLVER AND CARBINE COMBINATION
USING .357 MAGNUM IS MODERN-DAY
OUTFIT FOR BOTH PLINKING AND GAME

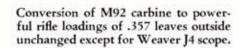
Standard .38 Special cartridge is used by Ken Shackleford in converted .357 carbine to splatter clay birds. Same load is also used by Shackleford in his pistol target shooting. Lighter powered .38 in carbines .357 chamber has less recoil.



By KENT BELLAH

S HOOTERS TODAY laugh at the idea of a "two-gun man," but modern woods hunters are finding that the old idea of a two-gun outfit is one of the smartest notions to come back into vogue. I don't mean two handguns for slap-and-draw, but I do mean the kind of outfit granddad packed over plain and prairie, a combination of light rifle or saddle carbine and a pistol of the same caliber.

There are many uses for a pistol in the woods, all the way from plinking at tin cans and popping squirrels for breakfast, up to holding your own when some truculent black bear finds you between him and the garbage pail. Around camp, it's a lot easier to carry a pistol on your hip than to carry a rifle constantly. But the kind of guns popularly used today don't "mate" right when it comes to caliber. If you want to carry a .22 pistol you have to carry an entirely different caliber rifle. There are greasy .22 cartridges to drop in the dirt or pick up lint in your pocket, and they are no good for administering the coup de grace to a wounded animal that may be down but not out.



Hunters have turned to bigger calibers for woods pistols; the powerful .38s and the hotter .357 S & W Magnum are now carried by many. And some hunters are taking another look at that .357 cartridge, for it is the answer to the "rifle and pistol combination" problem.

In the old days many frontiersmen found it a big convenience to use the same ammunition in handgun and long gun. Nobody thought anything of tackling a grizzly bear or a buffalo with the weak black-powder .44-40 Winchester. The combination of lever action '73 and a Colt or "Frontier" Smith & Wesson in that caliber was popular, but using the same ammunition was too good to last. Smokeless powder changed the picture.

Rifle cartridges became far more developed than pistol cartridges. Shells for handguns remained almost unchanged from black powder days, while hunting rifle loads got bigger and faster and more powerful—too powerful, it seemed, to use in a handgun. And then in one big jump the handgun caught up to the rifle, and the powerful cartridge developed for a revolver proved to have characteristics which would make it a very good light rifle cartridge. That happened to 1935 when Smith & Wesson brought out the revolutionary .357 Magnum revolver.

The .357 chamber pressure was almost equal to the pressure of the present service rifle cartridge, caliber .30 M2. The .357 original velocity was faster than 1500 feet per second. The muzzle energy of over 800 foot-pounds was about double the most powerful big bore handgun leads. Understandably, shooters said it "shot like a rifle," and there was a reason.

The .357 revolver used the only cartridge that was designed originally for smokeless powder. All black powder pistol cases are oversize for modern dense powders, and so the burning efficiency is more or less reduced. With 2400 type (Continued on page 46)





Standard .38s and .357s will feed okay when guides are altered. Test bullets (L to R) are Keith, Lyman standard Magnum, Protoxbore with zinc base, and the new Harvey Jugular Express. Bullet tips show cross cuts from sizing punch on noses of Keith, Sharpe, Harvey, and Bellah's extra large hollowpoint.







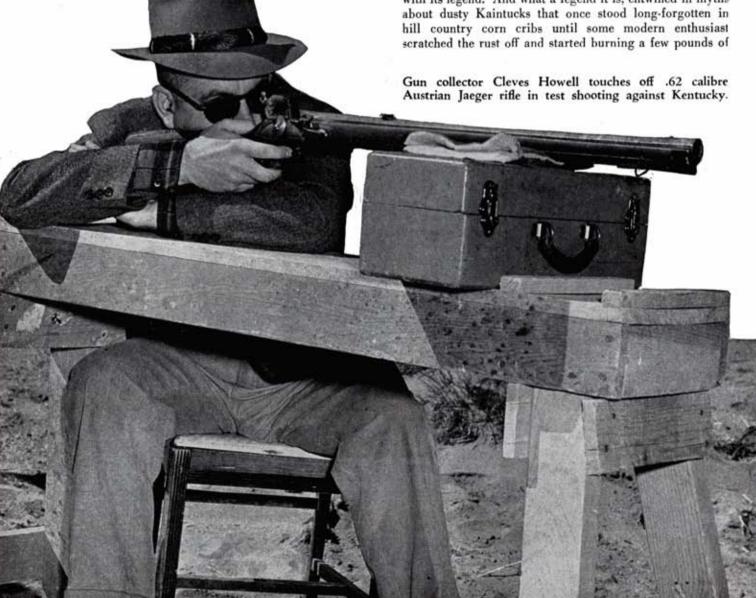


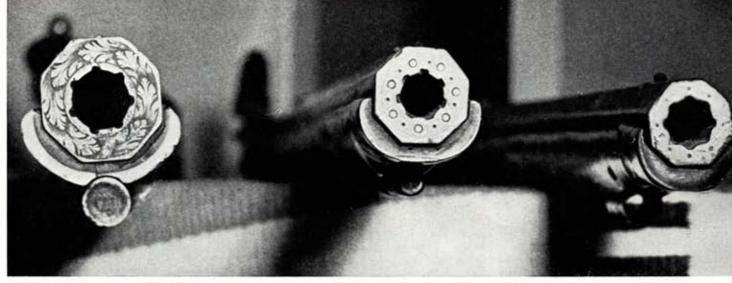
THE REAL PROPERTY

BELIEF THAT FRONTIER RIFLE WAS PECULIARLY AMERICAN INVENTION EXPLODED BY SHOOTING STUDY OF GERMAN HUNTING PROTOTYPES By ROBERT J. KINDLEY

THE KENTUCKY RIFLE! Mention that magic symbol of super-accuracy and speed loading of a century or two ago among any group of riflemen and watch their eyes light up and the arguments get started. No other weapon in the annals of our history has enjoyed such fame or been so enthusiastically lied about.

Any one even remotely interested in firearms is familiar with its legend. And what a legend it is, entwined in myths





Muzzles of long Jaeger (left) and target or hunting Jaeger (right) show most marked resemblances to old Kentucky (center). Arbitrary dot punch design of Austrian gun is repeated on Kentucky. Rifle grooves are all semi-circular.

black powder down the long, graceful barrel. That legend has snowballed until now popular belief has it that the accurate rifle, exemplified by the Pennsylvania or Kentucky flintlock of Tim Murphy and Morgan's Riflemen, was strictly an American invention, a product of the frontier times and the needs of the American backwoodsman.

Coupled with this is the belief that some unrecorded Pennsylvania gunsmith, probably near Lancaster where the earliest "Kaintucks" were made, was the inventor of the patched ball system of loading which accounted for the Kentucky's superior accuracy. Yet in the cold light of history, and some latter-day tests in actual competitive shooting which I did a few months ago for Guns Magazine, nothing could be farther from the true facts.

The Pennsylvania rifle is a direct descendant of a sort of "missing link" of European hunting equipment, the seldom-seen "long Jaeger." The word "jaeger" denotes a huntsman, or a forester whose occupation was to serve a nobleman by keeping his deer park free of poachers. Thus their guns came to be called by the name of the users, "Jaeger rifles." They were the most perfected pattern of sporting rifle in common use in Germany, Switzerland, and Austria at the end of the 17th century—the late 1690's.

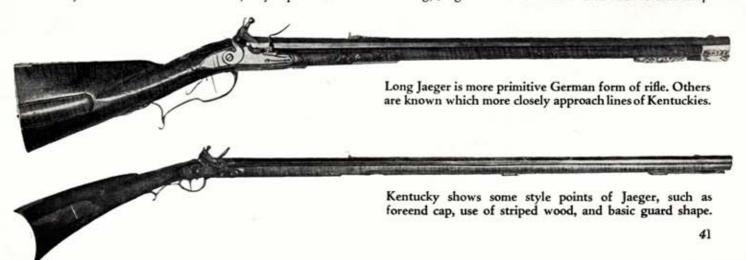
When the great military levies of Frederick of Prussia and the other kings and warring princes of Europe began to put the bee on husky youths, a great wave of German and Swiss immigration moved westward to the New World. These people from "mittel Europa" settled in eastern Pennsylvania, and their descendants today are oddly enough the "Pennsylvania Dutch." Back in 1700, they expected to live

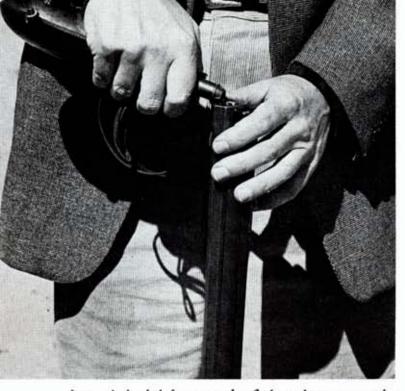
off the land, and their rifles were as much tools of existence as plows or axes. These pioneers brought with them rifles of the best designs then made, as accurate as they could build them. This weapon was the "Jaeger" in both short woods versions, and long or mountain, "Tyrolean" versions. It was this latter weapon which became the direct ancestor, the "grossfadder" of the Kentucky rifle.

Among these immigrants were gunsmiths who had served their apprenticeships under the great European master craftsmen. Thus, the early Kentuckies or Pennsylvania rifles bear marked resemblances to the European prototypes. A noted antique arms dealer in Vienna once showed me a double barreled "roll over" Jaeger rifle, typical in all respects of German manufacture, except one important detail: the patchbox was all-metal. Usually made of wood, with a sliding wood cover, this patchbox was shaped from sheet brass in the form of a stylized rooster, a typically American pattern. The dealer swore it was "American," but the so-typically German appearance of the rifle had me wondering.

But now I wonder a bit more, if perhaps it wasn't really American in the rooster motif but European in the designs learned so well by the immigrant German gunsmith who made it? Certainly many of the early Lancaster rifles show typical Jaeger features—large triggerguards, .60 caliber bore or larger, simple raised carving, even patch boxes with sliding wooden covers and rifling with seven wide, semicircular grooves.

With accuracy an important need in early European target shooting, Jaeger rifles of excellent finish and workmanship





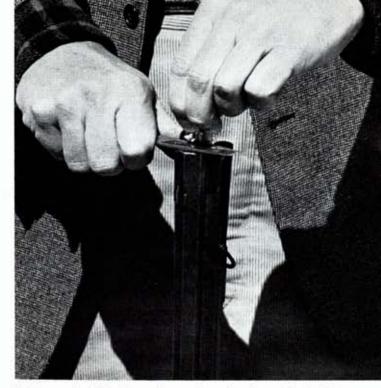
Jaeger is loaded from powder flask or horn at muzzle.



Wooden bore-size ramrod pushes ball down onto powder.

were produced at the beginning of the 18th century. German and Swiss hunting arms were especially fine, and it was from these that the Kentucky became developed in style, but not improved in accuracy. To settle this question of accuracy in the old Jaeger rifles against the acknowledged, world-famed accuracy of the Kentucky rifle, I tested actual examples of the various guns, under ideal conditions of loading and sighting from bench rests.

An excellent example of the short Jaeger was obtained



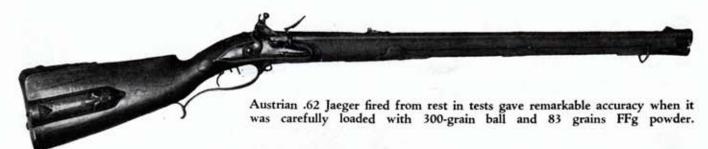
Ball is patched like Kentucky, and patch trimmed by knife.



Fine powder is used for priming, then pan cover is closed.

from Cleves Howell, the rifle collector of Albuquerque. An Austrian flintlock, it is unmarked and undated but appears to have been made between 1720 and 1760. Conforming to target requirements, it has a short, octagon 27 inch barrel; overall length 42½ inches. Caliber is .62" and it is rifled with 7 wide, semi-circular grooves about .010" deep, one turn in 22 inches.

Cleves also has a beautiful example of the longer Jaeger rifle, which is more nearly similar to the Kentucky. This



particular weapon has a heavy, 36" octagonal barrel with a bore of about .60 caliber. The 7 groove rifling is approximately .010" deep and has been cut with a circular cutter, a typical feature of most Jaegers. The circular grooves were possibly easier to cut and much easier to keep clean of powder fouling.

Cleves Howell also supplied an authentic Pennsylvania flintlock rifle made sometime between 1760 and 1780. Although this weapon is of a somewhat later period than either of the two Jaegers it still shows some of the European features. One of these is the raised carving on the top of the wrist around the tang and around the cheek piece.

The most distinct similarity of the three rifles, however, lies in the rifling. The Pennsylvania rifle has seven grooves and, while they appear to be rectangular, actually the grooves in the bore are of a circular cross section, the same as both of the Austrian rifles.

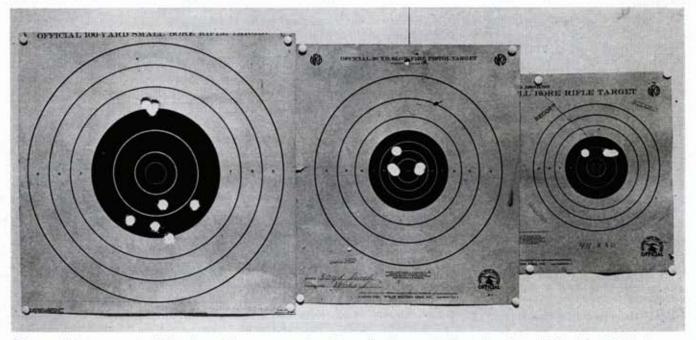
We shot both types of weapons to see what degree of accuracy could be obtained from each. The short Austrian .62 caliber Jaeger, a .50 caliber Pennsylvania flintlock made around 1770, and, as a comparison, a .45 caliber modern flintlock made by Dick Hicks, Albuquerque gunsmith who specializes in these weapons, were chosen for these tests.

To shoot accurately, any muzzleloading rifle must have the correct combination of ball and patch. The diameter of the ball as compared to the groove diameter of the bore will determine the thickness of the patching material. The patch should effectively seal the grooves and yet allow the ball to be loaded with a steady, even pressure. The material must have a firm, strong weave so that it will withstand being shot out of the barrel without cutting. Denim, cotton toweling, linen, and pillow ticking are some of the more common fabrics used.

In selecting patching material for the three rifles used to shoot the groups, care was taken to choose that which would give the best accuracy. For example, the Austrian Jaeger has a .620" bore. The lead ball used in it measured .600". The grooves of this rifle are approximately .010" deep. A medium weight pillow ticking was selected that measured about .040" when set up fairly tight in a micrometer. With this material a fair amount of pressure had to be exerted on the wooden ramrod to seat the ball. Examination of several patches after firing showed no signs of cutting and this particular material proved very satisfactory.

All firing for these test groups was done from the bench using a muzzle rest, simulating some of the rest matches that were shot in colonial times. The range was approximately 60 yards, a range at which many of the old time matches were shot. Due to the rather wide front sight on the Jaeger the 100 yard smallbore target was used with it. The finer sights of the Pennsylvania and the Hicks rifle allowed us to use the smaller 50 yard target bullseye.

The first load shot in the Austrian Jaeger was 68 grains of FFg powder behind a 300 grain pure lead ball, .600" diameter, patched with pillow ticking. A five-shot group was obtained measuring, center to center, 1½" vertically and 3" horizontally. Due to a "fishtail" wind blowing alternately from 5 to 7 o'clock and acting on the big, windsensitive round ball, the horizontal dispersion is somewhat larger than might be expected with this rifle. However, the group shows excellent accuracy that would be creditable even for a modern hunting rifle. (Continued on page 58)



Sixty-yard Jaeger target (left) showed groups equal to Kentucky (center card) and modern Hicks rifle (right) in tests.



GUN FINISHING PRODUCTS SUN RAY GUN STOCK FINISH—FAST, BEAUTIFUL



The fastest, most beautiful finish of them all is SUN RAY GUN STOCK FINISH. It's used exclusively by many stockers, gunsmiths and manufacturers \$1.25 per 4 oz. kit.

X2X COLD METAL BLUERfor steel, brass, copper and alu-Completely new formula. Never before used in a commercial bluer. Equals hot

process in all respects. \$1.25 per 4 oz. kit.

X2S for stainless steel, will blue any metal from lead to Sklar-Stainless steel within one minute. Even gold, silver, and plat-inum may be blued with Sun Ray X2S bluer. \$1.50 per 4 ox. May also be used as a wood stain.

X2 COLD PLATING SOLUTION for small steel, brass and copper parts. Plated by submerging one minute. Gives heavy blueblack plate. Hard, durable. From \$1.00 for 4 oz. to \$15.00 per gal. 25c postage per kit.

Refer all orders for New England States to:
--Monadnock Sport Shop, Milford, N. H. Popular discounts on all products to the trade. Exceptional proposition for JOBBERS. Write:

BLEVINS GUN SHOP

303 Pine Avenue-G

Fresno 4, California

HUNTING & SHOOTING EQUIPMENT

nakalia manananan mana
M/70 Win. all cal. std. gr\$120.95
M/94 Win, carbine 30-30 69.00
M/64 deer rifle 30-30 107.95
M/64 std. 30-30 91.60
Rem. 721 30-06 & .270 88.90
Rem. 722 .244, 222 & .257 82.80
Rem. 740 auto, std. 30-06 124.95
Rem. 740 ADL 30-06 139.95
Savage 99-EG .250 Cal 108.60
Savage 99-R .300 Cal 108.60
Lyman 4X All American scope 49.50
Lyman All-American 6X scope 59.50
Stith 4X Bear cub scope 59.50
Kollmorgen 6X double 79.50
Unertl 4X Hawk scope 52.00
Unertl 6X Condor scope 66.00
Pacific Super tool complete 39.95
C & H Magnum press complete 55.00
C & H "C" type press complete 33.00
Ideal Tru-line press complete 25.00
Ideal EZY loader complete 58.75
Lachmiller shotshell complete 60.00
Redding powder scale
Redding powder measure 16.00
Ideal powder measure
Shotgun primers 15.00-M
Rifle & pistol primers 8.95-M
All sizes shot 5-lb bags 2.00
Except, buckshot 5-lb, bags
Complete stock of Rem., Western, Sierra, Hornady & Speer bullets.
All 22 Match ammunition per-M 21.00
Special to clubs 10-M 159.50
Regular 22 ammunition 10-M 107.00
All items prepaid except primers, powder, shot & ammunition.

THURMAN RANDLE & CO.

208 N. Akard St. Dallas, Texas

Official southwest distributor of NRA

By STUART MILLER

Army Shotgun Shells

THE 20 GAUGE "forager's gun" shells represent the Army's only serious venture into the shotgun manufacturing field. The shot shells were designed for reloading use in a flip-up Springfield gun "sporterized" at the National Armory in 1882. Originally suggested by Col. J. C. Kelton, the Springfield shotgun was used by frontier regiments for hunting small game, An economical alteration of the ordinary M1873 rifle was effected by fitting an old .58 caliber musket barrel which had been reamed smooth to 20 gauge. The stock was slightly changed and cut short from the original long rifle length.

In addition to empty primed cases, Frankford Arsenal in 1882 and 1883 made "3,020 cartridges for shotguns." They were undoubtedly loaded shells, but the details of how they were loaded. type of crimping-if any, or top wad markings are still a mystery to me. An item from Bannerman's 1917 catalog may give one answer: "20 gauge shotgun buckshot cartridges. Made at U.S. Government arsenal, loaded with 75 grains of black powder and 4 layers (3 each) total of 12 buckshot . . . center fire copper shells . . . length of shells 21/2" . . ." Now I am still wondering if these were actually arsenal loaded, or whether they were merely a quantity



A small lot of these guns was made up and issued to western troops for trial. Such was the success and enthusiasm which greeted their trial issue, that soon enough shotguns had been manufactured to equip every troop or company west of the Mississippi with two guns per outfit.

For the shotguns Frankford Arsenal made quite a quantity of empty primed shells, to be loaded and reloaded by troops in the field. These cases were made of three different materials, corresponding to the metals used in other small arms ammunition of the time. These were (left case) the copper case centerfire of which the sample shown is headstamped "F 10 84 No 20"; the tinned brass case which is in this sample marked "F 4 99 No 20"; and the right case shown which is the regular brass case marked "F 9 00 No 20." Other dates no doubt exist but these appear to be the only three types of cases.

loaded by the troops in the field and then never fired? I would like to have seen some of these shells and the labeled boxes.

Both guns and shells were still being issued in 1904 to western troops, at the rate of two guns per company, and 500 rounds of shells were issued per year. At this time the 20 gauges were being replaced by the Winchester 12 gauge pump guns. The shotguns were intended for hunting small game, and only shells loaded with #4, #6, or #8 shot were used. The 12 gauge shells were all purchased from commercial ammunition companies, as were some of the last lots of 20 gauge forager gun

Spotlight on Shorts

I have received some more information on those Winchester "Spotlight" .22 shorts that I mentioned in the June issue of Guns. Paul Foster of New Haven writes (Continued on page 67)

RICES SLASHE

Recently we moved into our own brand new 2-story building. This was an exciting event for us because we have been able to streamline our complete operation to cut down costs, and pass these

savings on to you. Send TODAY for our huge, beautifully illustrated photo "jumbo" catalog, featuring over 20,000 used, modern and antique guns, now being sold at LOW prices that you can afford. Take advantage of these senational gun offerings, and remember, that all merchandise carries my personal Brass-Bound, Iron-Clad GUARANTEE of satisfaction or your money refunded pronto." Hu Hunter

20,000 GUNS-HUGE Photo Catalog 162 20,000 GUNS-HUGE Photo Catalog 162
pages, 8½"x11" for Gun Collectors. New,
Used Antigue Guns. \$2.50 to \$4,500 each.
Thousands of photographs individual
prices, descriptions, etc. Only \$2. Ppd.



\$**69**95 .22 Caliber,

51/2" barrel only Fires short, I or long rifle long,

BRAND NEW! MADE OF MODERN STEEL! The only replica of the orig-inal famous Frontier Six Shooter in appearance, feel and action. Made of the highest quality aircraft type steel. Hand, bolt, trigger are made of fine Beryllium copper. Unconditionally guaranteed for one full year against break

age, in normal usage. The safety and performance of this remarkable six-gun are the equal or superior of any hand gun produced in the world today.

"THE GUN THAT WON THE WEST"

ALSO AVAILABLE in 494" and 71/2" BIG FRONTIER SIXSHOOTER Photo Catalog bbl. lengths at slight additional cost. Please specify engths at All new popular Frontiers from .22 to .45 cal. Gold and Silver presentation models, flattop target models, special grips, holsters, ammo. Only 50c. Ppd.

SENSATIONAL VALUE! • BRAND NEW MIGHTY SPECIAL MIDGET

(Fg) Brand new. Beautifully made. Fine precision Revolver, Cylinder holds 6 cartridges. Fires new .22 Remington Rocket or any .22 short or long ammo. Both single & double action. Perfect for camping, target practice, etc.

CO2 LUGER REVOLVER SEMI- AUTOMATIC PISTOL .22 CAL.

New Repeater - High Velocity CO/2-powerful 8 shot repeater. Perfect balance and reproduction. Economical, uses all standard CO/2 cartridges, .22 caliber, with revolutionary new firing principle. Target adjustable sights. Automatic residue drain. FREEI *Extra high power \$7495 cylinder. *200 rounds of ammunition.

AMERICAN

SCOTLAND

"I horsetraded a stable full of guns from Scotland Yard that they've been lifting off of thugs and scalawags for the last fifty years. Some of these guns are so old they look like they had bows and arrows traded in on them. Some of them are guns 1 never heard of. They aren't in the yard. I'll ship you these guns with a notarized personal letter from me verifying their origin."

different guns... ... \$17.00\$23.00 (f.o.b., Burbank) "Now for the first time ever offered, here is a rare collection of guns that were taken from French criminals over a period of the lost 100 years by the French Secret Police called the "Surette." For years fiction story writers have given the public the "inside" stories of romance and strange tales of the French Secret Police.

FRENCH SECRET SERVICE POLICE GUNS

ENFIELD.303 CAL.
RIFLE Bolt action rifles,
in good condition. Used
by the British Gov't. as
t he ir standard Military Rifle. Makes a very nice sporter, and amma. is reasonable. Good for all big game hunting. \$24.95

COLLECTOR'S SPECIAL Special purchase of antique European military revolvers

rare and unusual cali rs. Each one from a differ ent country. Fair condition. 6 for \$50 3 for \$28.50

STEYR (HAHN) ENFIELD .410 SHOTGUNS AUTO PISTOL Very rare and unusual, weapon \$14.95

MAUSER 95

This short action is

This short action is used with great success in building sporting rifles such as the 300 Savage. 7 MM Mauser, .35 Remington, 308 Winchester, .257

Winchester, .2 5 7 Roberts, and other calibers. Add 50c for

each action to \$13.95

field .303, but really a .410 guage single shot. Used by British officers in India for bird shoot ing. \$38.50 EASY PAYMENT PLAN

Here are some of the guns that made the "action" in these tales of romance and intrique. With your guns, you will receive a personal notarized letter from me verifying their origin." Hy Hunter Hy Hunter DEN SPECIAL

I just corraled 5000 guns from all over the world, representing darn near every country you e v e r heard of. While they last, I'll ship you — 1 for \$12.50, 2 for \$20, 3 for \$25. No two alike.

SPANISH EIBAR .32 Cal. Auto Pistal Beautifully made, secret police Span ish auto. A v fine Automatic Pistol at an unusually low price. \$17.50

6 FT. LONG AFRICAN-ARAB TRADE MUSKET These were made by the Holly-wood Studios for their Africa Motion Pictures An unusual col lector's item

for den or cabin, \$19.95

MAUSER RIFLES MM Cal. in fair. An excellent hunting riffe. Used by the Germans in the 2nd World War. One of the finest of the high powered rifles. \$37.50 capsule of blanks. excellent hunt-

73 MAUSER 98

ACTION

Standard long action that is used to build sporting rifles in the following calibers: 30-06 Springfield, .270 Winchester, .300 Savage, .308 Winchester, 7 MM Mauser and many other calibers. Add 50c for each action ordered to cover postage. \$18.95

Group I Guns up to 50 years old.

guns for \$17 3 guns for \$23 5 guns for \$35 (all guns f.o.b., Burbank)

Group II Group II
Guns over 50
Years old.
2 guns for \$19.50
3 guns for \$27.00
5 guns for \$42.50
(all these are the rare pin fire rare pin models.)

SMITH & WESSON
.38 Cal. Revolver.
In 5" or 6" bbl. The stand and model of the military and police service. A beautiful weapon that will give years of dependable service. Excellent condition. Now offered for the first time at this lov price.

S & W TYPE SPAN-ISH REVOLVER Breaktop .445 Cal. Good condition. A powerful gun you don't see in many collections. A real \$9.95

PANCHO VILLA CARBINE

These guns cracked with conquest in the hands of Pancho Villa and his raiders in the Mexican u prisings These guns crackled against Diaz. 7
MM rolling block.
Fair condition. A
great collector's
item. \$18.50

WEBLEY & Cal. Automatic Revolver The only true au tomatic Revolvér. A very rare gun. Af-ter each shot the cylinder automatically revolves and hammer comes back for next shot. A beautiful Target Re volver with a very fine

ENCLOSE WITH GUN ORDER: Fill out the following statement, and sign your name, with date, age and address: "I hereby state that I am a citizen of the United States and that I have never been convicted in any court of the United States, the several states, territories, possessions, or the District of Columbia, of a crime of violence, nor am I at present under indictment or fugitive of justice." NOTE: For C.O.D. send a deposit of 1/2. Some states require gun purchase

Select the gun of your choice today, and pay for it in full later! Just send 10% of total price on any purchase, and we will immediately open an account in your name. As long as much or as little as you wish each month. When your account is paid in full we will then process and fill your order promptly. YOU ARE CORDIALLY INVITED to visit our mammouth gun store and museum when you are in California. Located right near Los Angeles.—

"In the San Fernando Valley" 3029 WEST BURBANK BOULEVARD **BURBANK 14M, CALIFORNIA**

action.

If you don't like it return it within 30 days of the date you receive it and the store will refund your money pronto.

MONEY BACK GUARANTEE

THE TWO-GUN MAN COMES BACK

(Continued from page 39)

powder, the Magnum case is almost filled, giving excellent loading density and performance that is as good as some rifles—so why not use it in rifles? The .357 Magnum cartridge could begin commercial revival of the old time combination outfit, teamed up with a rifle like an improved Model 1892 Winchester carbine.

Modern Magnum fodder is a pretty stiff load—the listed velocity in a 8%" barrel is 1450 f.p.s. Our test of one lot of Western Super-X indicates the actual instrumental figure at 1350 f.p.s., while another lot in a 3½" barrel recorded only 1175 f.p.s. Remington ammo in a slightly shorter case registered only 1050 f.p.s., which is still a good heavy load in the short barrel gun. All makes now use small pistol primers that are hotter and give better ignition than they did 20 years ago. Now Western cartridges are loaded with their new ball powder, which, like the old 2400 type, seems to be efficient in either revolver or rifle.

In a short, lightweight carbine the .357 cartridge is one of the best for inexpensive plinking or moderate range hunting. Accuracy is "built in" while 2400 powder comes into its own in the long barrels. Most of the strong European or other single shots like the Hi-Wall or light Martini rifles can be rebored and chambered for Magnum cartridges. Some actions have a long, slow hammer fall that is not desirable, but can be improved by a good gunsmith. Practically all have an oversize firing pin hole for low pressure loads and of course it must be bushed. The firing pin must be fitted to hit the primer dead center and prevent erratic ignition with modern primers. This detail is necessary if good results are to be obtained from the inherently accurate .357 "light rifle"

The handiest, most useful arm for reworking to be a companion rifle to the Smith & Wesson, Colt. Ruger or Great Western .357 revolvers is the little Model 92 Winchester carbine in 25/20 or 32/20 caliber. Of course, other light "semi-obsolete" rifles such as the BSA Martini "cadet rifle" can be successfully reworked if in a caliber smaller than the .357, but the Winchester has the advantage of being a repeater, instead of just a single shot.

The 92's were discontinued in 1937, but good used ones may be bought from as low as \$20 up to \$50 or so. Component parts are available, as thousands of the Model 92 were made, and many are still in use. The carbine has a 20" barrel, while rifles have a 24" round or octagon barrel. The carbine has the desirable solid frame, weighs 5% pounds, and holds 12 rounds in the magazine, plus one in the chamber. Rifles in either solid frame or takedown models weigh seven pounds, and barrels are longer and heavier than necessary, which causes a less perfect balance. The carbine makes the neatest gun. Accuracy is fully as good as in the rifle with the several we have tried.

Winchester advises against converting 92's. No gun maker will assume any responsibility for accidents with altered guns, or with handloaded ammunition. The black-powder 32/20 and 25/20 calibers developed about

1/3 the pressure of the .357 original, but the old guns had quite a margin of safety. The guns we converted, and others, have been proofed with excessive loads, and fired hundreds of rounds of commercial and heavy handloads with no sign of strain. All '92 barrels were made of soft steel and the old guns are as good as the new ones with serial numbers around 1,000,000. It is important for safety that actions should be tight and in good condition. Worn parts must be replaced. The action alteration is not a job for "hobby gunsmiths." It should be attempted only by a competent mechanic familiar with the problems involved. Even skilled workers will find some problems can only be solved by experience with several

Several shops will do the conversion work. Ward O. Koozer of Douglas, Arizona, is a careful workman and has done exceptionally nice work for us. He guarantees his work and the last report we had, he did the complete job for \$35 on guns in good condition.

The '92 actions were designed for bottle neck cartridges. In order to make straight revolver cases feed properly, the cartridge guides must be built up, and the sides of the bolt must be milled to clear the guides. The magazine port in the receiver must be enlarged, as well as the bolt face, to accept the larger case heads. The firing pin hole is bushed. The barrel is rebored, reamed, rifled and chambered. Koozer has a special method of adjusting head space. In addition to the usual conversion work, the gunsmith may have to "fiddle" with each individual rifle to insure perfect feeding. Straight cases simply do not chamber as easily as the bottle-neck variety.

Almost any rifling twist can be ordered in the rebored barrel, but one turn in 18 inches is about right for most factory ammunition or reloads. The commercial Magnum cartridge in a 20" barrel gives an instrumental velocity of 1670 f.p.s. with 977 foot pounds of energy. The 20" barrel burns 2400 powder to perfection.

Reloaders will find the .38 Special chamber and case is fully as efficient as the commercial Magnum load, as bullets can be seated out. With Magnum cases for revolver use, bullets must be seated deep, or the cartridge will be longer than the cylinder. Extremely hot loads can be made especially for the Magnum carbine, by seating the bullets out. Such cartridges will not be accidentally used in the revolver because of their greater length. Flat nose bullets should be used in all tube magazines.

Pointed or metal penetrating bullets might explode a cartridge in the magazine tube when the arm is fired. They are perfectly safe if loaded directly into the chamber, or with one in the chamber and only one in the magazine. We have used factory round nose .38 Special lead bullets without trouble, and the recoil with this ammunition is very mild. It has a slightly different center of impact than .357 loads, but it is dandy for plinking or short range hunting.

Most gun experts would not rate the conversion as powerful enough for deer, but we have proved that the lead bullets have far greater killing power than ballistic tables indicate. It is a wicked killer at more than 100 yards.

I don't want to go on record as claiming that the .357 Magnum revolver cartridge is the "ideal" big game caliber, but I have taken deer with the revolver without difficulty and the carbine with the longer barrel has considerably more punch. Heavy handloads with hollow point bullets will explode small varmints, with more destruction of tissue than more powerful rifle cartridges that use jacketed soft point bullets. All the bullets and loads I have tried gave good hunting accuracy, with groups as small as 2 inches and an average of about 3 inches at 100 yards.

One of the main variables in handloading this .357 stuff for both pistol and rifle is the bullet design. Hollow points used in handloads include the Sharpe, Keith, Harvey Protoxbore, Thompson Gas Check, and a bullet of my own design with a very large hollowpoint.

Sort of a take-off on the popular idea of a "dum dum" bullet, I had Hensley & Gibbs make a cruciform nose punch to fit my bullet sizer. When I size cast bullets they automatically have a cross cut about .025" deep on the nose. This increased the expansion of plain hollow point bullets at low velocity in revolver loads.

In developing new loads to work okay in the revolver, and perform well in the carbine, I expect to get still higher velocity and better killing power with a new bullet not yet on the market. Named the "Harvey Jugular Xpress," it uses a jacket to cover the bearing surface to prevent stripping or leading, and a soft lead hollow point nose. Lakeville Arms Co., Lakeville, Conn., the makers, sent me five test bullets which were loaded with 17 grains of 2400 and fired in the carbine. There was no sign of high pressure. Lakeville also makes the "Protoxbore," a soft lead bullet with a zinc gas check washer base. It is shot dry, without lubricant, and has better killing power than any factory bullet I have tried. It did give some leading in the carbine at maximum velocity, and this could probably be avoided by reducing the velocity slightly or putting a little lubricant on the base,

On all other bullets a graphite type lubricant is recommended for high speed. Don't mix extra-large cross cut hollowpoints in with your rifle loadings, the huge hollowpoint will sometimes open up in flight from air pressure alone and fly wild on the target.

Not everyone wants to run right out and buy an expensive .357 revolver, even if the idea of cutting out a carbine seems reasonable. Two choices are left: cut the carbine to .357 and carry extra .38 Specials for your revolver, or make both guns use the .38 Special. In the carbine barrel, the .38 Special is a potent load and you will be surprised at the powerful performance of the relatively mild commercial revolver cartridge when fired in the carbine. The easy-to-handle '92 is fine for aerial targets such as clay birds or tin cans. On squirrels and small game, the big bullets are far superior to .22s.

Winchester's old lever action rifles were not designed with scope mounting in mind, and the stock comb is entirely too low for conventional side mounts. I've solved this by putting the mount on the right side, the reverse of the usual instructions. Because of the position of the scope, the stock acts as a cheek piece and is almost as good as a custom cheekpiece stock on a bolt action rifle. This tip for scope mounting works equally well for the Winchester 94 and similar arms. When the scope is offset to the left it is very difficult to use properly, as the need to keep your eye in line with the scope makes most men hold the cheek away from the stock. When you have to look across the stock into a right mounted scope, it is perfect.

A four power scope is a happy combination between magnification and bullet accuracy. Koozer fitted a Weaver J-4 in a Weaver side mount to the completed .357 Model 92, so either iron or optical sights could be used.

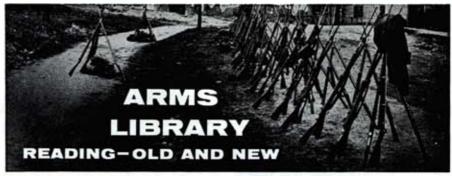
From the moment the Magnum was available to this day, demand has exceeded supply. For a while, the high priced revolvers brought a premium, which caused gunsmiths to alter 38/44 and other heavy frame guns to chamber the Magnum cartridge. No doubt the arms and ammunition makers broke out in a justified cold sweat. We don't know of any altered guns blowing up, but those that were fired very much were turned into junkers. One heavy frame we had altered for a test was badly shook-up after firing 50 rounds of the original Winchester ammunition.

The gunmakers have finally corrected this lack. Smith & Wesson makes a more roughly finished version of their deluxe Magnum, called the High Way Patrolman, which sells for a little over half the higher price and a "K" Magnum on their .38 frame will soon be announced. Co!t makes two Magnums, their "Three-Fifty-Seven" target model and a deluxe, customized cannon called the "Python." Ruger has produced a modernized single action "Blackhawk," and Great Western's "Atomic" is similar in loading to original Magnum ballistics. With seven handguns to choose from, there should be no need to clobber up potentially dangerous revolvers to handle the .357.

At least one importer-gunsmith offers single-shot light rifles converted to .357, which do not have the repeating advantage of the Winchester but are otherwise as good. Both carbine and pistol will take game, but the carbine extends the effective range of the .357 cartridge and permits much greater practical accuracy, especially with a scope. As short range hunting and plinking companion guns, the revolver and carbine using the .357 Magnum cartridge are ideal.

PHOTO CREDITS

8-David Sutton, Impact; 10-R. O. Ackerman; 15-Paramount Pictures, Brown Bros., Camera Clix, Frontier Pix; 11-Camera Clix, United Artists; 12-Frontier Pix, United Press; 18, 19-European; 20, 21-Fred Datig; 22-Joe Van Wormer, United Press; 23-G. R. Hunter; 24-United Press; 26-Paramount Pictures; 27-Wisler Western Arms; 28-Wisler Western Arms, Owen Gunstocks, Wisler Western Arms; 29-Hal Hartley, Ralph Pride, Shooters' News; 30-Brown Bros., Evarts Erickson, Harvard University Library; 31-Roosevelt Memorial Assn., Harvard University Library; 32-Brown Bros., Evarts Erickson; 33-Roosevelt Memorial Assn., Winchester Arms; 34-Winchester Arms, Roosevelt Memorial Assn., Brown Bros.; 35-Winchester Arms; 36-Remington Arms; 38, 39-Kent Bellah; 40 to 43-Dean Heath; 44-Chicago Photographers.



BIG GAME RIFLE by D. Henry M. Steb-BINS (A. S. Barnes \$5).

Subtitled "How to Select and Use Your," Doc Stebbins' book is described as "a text for beginners," "a reference book for old-timers," "a reading experience for all shooters." That about tells the tale—it covers most topics of importance relating to large hunting rifles. Well organized, the material is systematically presented so it may be easily referred to. Last, but not at all least, Doc Stebbins' friendly, wholly readable style assures this work will become as surely a classic to the readers as it was a labor of love to Doc.

CUSTOM BUILT RIFLES by Dick Simmons (Stackpole \$5).

Newest edition of a standard book on the subject, "Custom Built Rifles" thoroughly explores the problems in gun building-from shortening a military rifle to the finest craftsmanship of the gunmaker's art. Reflecting the modern trend towards guns built especially for the individual shooter, Simmons' book is chock full of useful information on lock, stock, and barrel. In the choice of the stock wood lies most of a modern rifle's "color" and, wisely, Dick Simmons has included a good chapter on the usual and the unusual woods for gun stocks. Names and addresses of gunsmiths and specialty manufacturers, in the appendix, make this book the first step for any shooter before building his custom rifle.

THE FIRST WINCHESTER by John E. Parsons (Morrow \$5).

Arms enthusiasts will need no introduction to John Parsons, whose previous books "The Peacemaker," and "Henry Derringer's Pocket Pistol," and the monograph on "Firearms in the Custer Battle" he co-authored with John duMont have securely established his eminent place in arms writing. But readers who thought they knew it all about Winchesters would do well to look at this latest from Parsons' typewriter. Uniform in format with his other books, this well-illustrated chronicle of the development and historical use of the Winchesters, from Jennings and Hunt through Smith & Wesson, Volcanic, New Haven Arms, and Henry to the yellow boy Model '66 and on into the '73 and '76 will surprise many "experts." Easy reading, this valuable essay on a specialized field of Americana, western Winchesters, ranks as a basic work on the subject.

BUFFALO BILL AND THE WILD WEST by Henry Blackman Sell and Victor Weybright (Oxford Univerity Press \$6.95).

Written by two obvious worshippers of the great scout and showman, this tribute to William F. Cody is no doubt a beautiful production, both pictorially and as popular prose. The authors have attempted not only to write a definitive biography of Buffalo Bill but also to project him against the times in which he lived. Unfortunately because of the nature of Cody's career, the book is more concerned with him as an entertainer than as a true product of the West. But when dealing with Cody the Pony Express rider, the Indian fighter and the buffalo hunter, Sell and Weybright give an accurate portrait of one of America's most colorful personalities.

THE FRONTIER YEARS by Mark H. Brown and W. R. Felton (Holt \$10).

As a photographer of the frontier, L. A. Huffman often displayed as much virtuosity with his camera as did Matthew Brady during the Civil War years. With fidelity and honesty, he recorded on film an epoch in American history. The best of his work has been carefully selected and is presented in this excellent book by two admirers, who have written an excellent account of the many historic events that Huffman recorded in Montana, Dakota and Wyoming territory. Particularly fine is their detailed chapter on buffalo slaughter with thorough information on guns and cartridges used by hunting parties.

THE RAIDERS by William E. Wilson (Rinehart \$3).

Based upon the oft-mentioned but littletold story of Confederate General John Morgan's raid into Ohio and Indiana, "The Raiders" vividly recreates a period which actually still lives in local lore and memory in downstate Indiana. "The Knights of the Golden Circle," a rebel-sympathizing Northern secret organization, planned to bring Illinois, Indiana, and Ohio into the Confederacy. Morgan's raid was a part of this plan. Mayor Henry Claybrun of an Ohio river town is the main pivotal character in this novel of unusual historical accuracy.

GUN DIGEST, 1956 Edition edited by John T. Amber (Gun Digest Co. \$2.50).

When I first met John Amber years ago I kidded him about the advertisement picture for the old Gun Digest that showed it about as thick as a Manhattan telephone directory. Well, looks like he has finally answered me. This newest opus is really a magnus. Between striking chrome yellow covers bearing pix of Ruger's new Blackhawk are nearly 300 pages crammed with the latest gun prices and statistical information, and 37 feature articles. The last is a set of 24 exploded drawings of Mauser, Colt, Browning and many other common pistols and rifles that will make this issue a

(Continued on page 73)

COULD GUNFIGHTERS REALLY SHOOT?

(Continued from page 17)

work unless he was specifically ordered to carry a weapon.

Actually, according to Governor Granville Stuart of Montana, who was not only a good man with a gun, but hired many who were, "Not more than ten out of a hundred cowboys owned a revolver in the 80's in Wyoming and Montana, although most of them had a rifle."

With thousands of cowboys from Texas to Montana and the cattle industry spreading everywhere on vast public ranges, disturbances were to be expected. But the record shows that despite the exuberance of ranch riders one marshal and a brace of deputies could usually keep the peace in a cowtown that was one solid line of saloons, honkytonks and bawdy houses. Of course, such marshals or sheriffs included fast-draw artists like Wyatt Earp, Bat Masterson, Wild Bill Hickok, Heck Thomas, Bud Ledbetter, Chris Madsen, Bill Tilghman, to name but a few of the better-known.

The cowboy didn't fare too well in his gunbattles in the cow towns that lived off the range trade and trail traffic. Even when he did a lot of shooting, he did very little hitting. Examples are legion, but one of the best is R. J. Jennings' eye-witness description of the free-for-all in Tom Shurman's Bar in Dodge City in 1881. Two trail outfits, each with 3,000 head of long horns, arrived at Dodge on the same day and camped on the grasslands surrounding the clapboard town. Three months on the monotonous trail had left both crews irritable, dry and ready for a toot. Both hit the saloons at the same time. Some 40 crowded into Shurman's and bar whiskey flowed like water. Within a few minutes some of the boys were carrying quite a head of steam.

One thing led to another and suddenly a M Bar rider began to pistol whip a cowboy from the Texas City outfit. This sport quickly ended when one of the friends of the latter whipped out his sixgun and took a shot at the M Bar cowboy. Guns flashed out of holsters and the din, according to Jennings, sounded like a replay of the Battle of Shiloh. More than a hundred shots were fired before the room was cleared—by way of both the back as well as front doors. When the mess was surveyed, the results were astonishing.

Not one rider had been killed or wounded!

A cat sitting near the piano had forfeited even its ninth life, and there wasn't a fixture or mirror left intact in the whole place. The managers of both outfits split the bill the next morning to avoid a mass arrest of their crews.

An even more dramatic example of wasting good ammunition occurred in Frisco, New Mexico, in 1884. A young Mexican rider newly graduated from a mail-order detective training course, and proud of his badge sent him by the school, rode into the western New Mexico cowtown just as a Texas cowboy from the Slaughter outfit began to celebrate by shooting up the town. This was a common use for the cowboys' sixguns during the period and was a familiar sport from the gulf to northern Montana and from Dakota Territory to the Sierra Madres. It simply consisted of getting well lathered with "rot

gut" whiskey, and then striding or riding up the main street of town taking pot shots at signs, lamps, windows and local natives.

The youthful horseman was named Elfego Baca and his visit was occasioned by the fact that his girl had recently moved to the town from Socorro. Baca asked the New Mexican justice of the peace why he didn't stop the cowboy from terrorizing the natives. "Don't be a fool," replied that official. "If I interfere he'll have all eighty of the Slaughter cowboys up here in an hour. They'll release him and then tear this town apart. They don't like mexicanos!"

Baca thought the reasoning silly and said so. "You can't convince those Texans to respect us or any other mexicanos by letting them walk all over you. I'll arrest that drunk."

He did—without any resistance from the celebrant whatever. But the justice of the peace was too frightened to try the man. "I'll not bring the Texans down on us."

"Then," Baca announced, "I'll take my prisoner to the county seat at Socorro." He took the subdued cowboy to the hotel and both put up for the night. Within a few minutes, however, the Slaughter foreman, Perry Perham, and seven cowboys rode up and demanded the prisoner. Baca calmly refused. Perham, still mounted, began an abusive tirade casting aspersions on Elfego's forebears. Without raising his voice, the mail-order deputy just commented, "I'm go-

ing to count to three and you've just that long to get out of town."

Perham paid no attention but launched into another threatening speech. Baca ignored it and began his count. "One. Two. Three!" At the end of his count both six-guns appeared in his hands as though by magic. Before the astounded Slaughter riders could recover and retreat, their foreman lay dead in the street, crushed by his horse. Three others were down. The rest left the plaza in a rush. Then the trouble really started.

During the night the Slaughter riders rode to every American ranch in the vicinity charging that the Frisco natives were bent on wiping out all the "Americanos." When some of the ranchers investigated during the early morning hours, they found everything peaceful. A hurried conference with the justice of the peace and Baca led to an agreement to try the Slaughter cowboy for disturbing the peace—a minor infraction—fine him and end what threatened to turn into a race war.

But the letting of Slaughter blood had to be avenged. Just as Baca turned his prisoner over to the justice, in rode the entire Texas crew—all 80 of them according to court testimony and uncontested eye-witness accounts. They cared nothing about their unfortunate companion. They wanted Baca... and they wanted him either stretching a rope or well ventilated with Texas lead. Even in the face of the whole crew, however, the 19-year-old Mexican refused to back down. When one of the Texans fired, he drew and covered the acting foreman and several others immediately in front of him.





MA

PICHATTOCK

FOLDING

Genuine U.S.Army Equip

The 1 quart conteen and aluminum cup with folding

Carry in car for emergency shovel. Has 20" hardwood handle. Blade

ARMY MACHETTE

Use around comp for clearing brush etc.
Has a 22" Variadium steel blade.
Hardwood handle. 27" overall length.

Small, easy to use. Has a 12" s head with a Mattack on one s and a Pick on the other. Has 165" hardwood NEW/29

mplete in rugged belt sheath

BOLO KNIFE &CASE

Made of finest quality, hardene steel. Has 15" blade. Ideal

folds to form shovel or pick. Ideal for Boy Scout, Gardener, Comper.

STEELFRAME

ARMY

RUCKSACK

NEW 8<u>95</u>

A \$12.95 VALUE

ARMY CANTEEN

BELT & CUP

Genuine ILS Army Equip.

handle fit snugly into the insulated canvas cover. Cover attaches to web pistal belt hooking on other gear......259

For Hunter, Hiker, Boy Scout, etc. NEW! Made of extra strong Army Duck. Has one large main compartment and three smaller

is mounted on a lightweight, comfortable

ular steel frame. Has web type adjustable soulder straps and bindings.

artments - all with covers. Entire Pac

for hunter, camper, etc. Comes complete with belt

sheath. NEW Only

RMY

Eliminates 12 Individual Items from your Pack or Tool Kit! Here is the Perfect, Combination Knife-Tool for every Outdoor Specials, Hunter, Camper, Fisherman, Boy Scout, Ranger, Rancher, etc. Think of it! 11, Fine quality Steel Tools, precision made to fold easily into the heavy bone covered bedy. In one neat, compact unit you have (1) a regular knife, (2) a fork, (3) a spoon, (4) a draw-knife, (5) a bone-saw and fisth-scaler, (6) scissors, (7) a can and hottle opener, (8) a cork-screw, (9) aw punch, (10) a screwdriver and (11) a metal file. All this PLUS a genuine leather, belt holster.

ORDER NOW While We Can Guarantee Delivery at this Special Low Price

A \$12.95 VALUE

Complete with
Genuine Leather Holster!

An all-purpose precision instrument for the Hunter, Hiker, Surveyor, Boy Scout, etc. Con be used for map orientation, taking an azimuth reading or as a guide on unfamiliar terrain. Has a 360 degree rotating bezel ring marked in 3 degree notches for fine computation. Cover has a special built-in "peep" sight and hairline guide for taking bearings on distant landmarks or objects.



Ideal for Fishing and Hunting. Made to top nt specs. Reconditioned & ready.

1 MAN 2250 7 MAN 6950 10 MAN //500 Hand Air Pump 395 COLLAPSIBLE DARS - /25EA

PARACHUTE CAR COVER

13ft.x20ft. 695 14ft.x22ft. 795

Finest Quality. Lustrous White, Has tremendous tensile strength. PRICE SIZE Strength 1/4" Orlan 11001bs 13erun, ft. 3/8" Nylon 2700 lbs. 1/2" Nylon 5000 lbs. 27¢run. ft. 18,000 lbs. 50¢ run. ft. sea green, braided Nylon, 1000 lbs. breaking strength. . . . 4¢ run. ft.

U.S.ARMY FIELD PHONE

com system. Ideal for use on target range, farms, mountains, forest or any place where portable two-

way communication is desired. This is th nous EE-8 field phone used to success by the Signal Corps. Gives clear reception up to 15 miles. Uses two standard batteries. Set consists of a ringing generator, one phone, all contained in a genuine leather carrying case. Several of these phones can Price for a SYSTEM-two sets ... 2950

POWER ARMY RIFLESCOPE

Built to rigid Government specifications. Contains precision made Achromatic lenses - fully corrected abberation and color, Has full 3 POWER magnification. Dat reticle. Overall light. 9". OWLY 995

SCOPE MOUNT - Specially developed for use with a Mounts on any type rifle. Has adjustments for windage and elevation. Will allow you to remove scope from the HOW mount for carrying or storage, and in addition you can re-mount without disturbing your pre-set windage or elevation. Made of hardened alloy steel. Mount only .

10 POWER NAVY SPYGLASS

Here's a real optical bargain. Manufactured by Wollensak for the U.S.Novy Bureau of Ships. A 10 Power Officer of the Deck Spyglass. Has top quality, fully coated, precision ground lenses. Adjustable eyepiece. Overall lgth. is 22-3/4", Complete in handsome hardwood case with brass hinges and locks. Used but excellent -

SPYGLASS - Same as above but ALL NEW

AL TOP



Another remarkable Navy Surplus Bargain. Originally designed as an Azimuth Telescope which mounted above the Gyra Compass. Has approximately 6 power magnification. Fully coated lenses Has approximately a power magnificance. Spare prism.

Crosshair reticle. Adjustable eyepiece. Spare prism.

Two snap-on filters — one for sun the other for haze. 24.95 lete in fitted wood case. New condition. . .

ARMY SURPLUS PANORAMIC SCOPE

Originally used as a gun sighting scope Objective head lens revolves through 360 degrees and tilts through an angle of approx. 30 degrees.
Tube assembly contains 11/16" x 3" dove prism.
Eyepiece is a 1" Kellner and eyepiece assembly a 90 degree Roof prism. Crosshair reticle. Approx. 4 power. Use for range finder, view-finder, etc.

Smallest, most compact, yet entirely practical cooking stove you've ever seen. NO PUMPING

NO PRIMING necessary — entirely selfgenerating. Has a collapsible grill for pan or coffee pot. Burns 2-1/2 hours on one filling of regular gas. ALL BRASS construction. Weighs 12 azs. Ideal for Hunters, Hilbers, Mountain Climbers, Prospector, etc. Fully Guaranteed for 1 YEAR.



WATERPROOF ARMY BEOROLL

An 80" x 96" heavy duty duck
canvas bedroll. Has roomy
pocket in each end, Makes
on ideal enclosed ground cloth

for sleeping bog or design or mattress. With (3) 495

2263 E. VERNON AVE., DEPT. GS-1 LOS ANGELES 58, CALIF.

Order From This Ad. Pay by M.O. or check. P.O.'s acceptd, from D&B firms. Y. deposit with C.O.D.'s. All Prices FOB Los Angeles.



Sliding up an alley adjoining the building he took refuge in an adobe hut in a small clearing.

Then started a 33-hour siege by over 80 men. During the night a dynamite charge blew down part of the building on top of Elfego Baca, but dawn saw a thin trickle of smoke curling from the chimney. Despite the nightlong siege he was cooking breakfast!

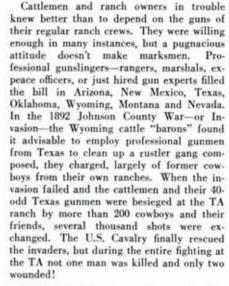
The Texans went berserk and poured volley after volley into the 12 by 20 foot dirt building. Another part of the wall collapsed pinning the deputy to the floor for two hours, but no one had the nerve to crawl up and investigate. During the siege more than 4,000 shots were fired. The door was riddled with 397 holes alone. Baca had gone into the hut with less than 40 cartridges. He had killed four men and wounded six others, but was untouched himself!

Although they could have easily rushed the hut and put an end to the battle—at some cost to themselves—the Texans remained prudent. Baca dictated his own surrender terms. At his trial in Socorro he was vindicated and freed—a mail order deputy who was a dead shot, one of the fastest men on the draw in the West, and subsequently one of the most effective peace officers in New Mexico and on the border. But 80 cowboys from Texas couldn't outgun him—4,000 cartridges to less than 40!

Other examples of mass shooting without much result can be cited in almost every cattle state. A Texas City, Texas, battle between cowboys resulted in more than 300 shots fired. Only one man was wounded in the arm and two horses killed.

A cowboy battle in the Basin country in Wyoming lasted two days. One rider was badly wounded after at least a hundred shots had been fired at a distance varying from 50 feet to 50 yards. Twenty-three men were involved.

Charley Siringo, famed cowboy detective, once told his boss, "You can't tell a gunman by the fact that he wears a gun. Out here it is part of a cowboy's full dress. His gun is to a youthful cowboy what a sword was to a young knight—an impressive sign of his fearless manhood and readiness to fight. But it doesn't make him a gunslinger!"



There were, of course, many good shots among the tens of thousands of cowboys who rode the open ranges. Just as they valued a well-rigged saddle, a black Stetson, or a fine horse, so most cowboys who owned a gun put great store by it, not because it was essential to their way of life, but because it was a symbol of their occupation. Many spent long hours cleaning and practicing with their guns.

The handgun became a trade item, with a large second hand market. Guns were expensive, which probably explains why many cowboys never owned one. But once having acquired such a weapon, a cowboy was likely to treat it as a cherished possession. When the newness wore off, it was an object of value that could be hocked for \$10, and scores of loan sharks did a land office business in loaning money to the cowboys.

There was a ready market for weapons lost by failure to reclaim or to pay the debt. Profits from the business ran as high as 300 per cent! According to one Montana loan shark, "I'd rather take a loan on a pair of sixshooters than on a steer!"

In searching for a murder weapon in Dakota in 1887, Deputy United States Marshall Timothy Tooms reported, "While a cowboy values his gun and keeps it clean, it is surprising how many are in poor shooting condition. I've seen men wearing guns that are in such condition that one pulling the trigger is more in danger of blowing his own head off than that of his quarry. The truth is that in many instances I am more afraid of being next to a man shooting than I would be if I were some feet in front of him. Most cowboys are very slow in drawing and unless they can take plenty of time to sight their weapons have little chance of hitting even a stationary target."

The plain fact is that cowboys as a group were generally poor shots. Many were young boys of 17, 18 and 19, who, like youngsters today of more tender age, liked to play grown-up and packed a gun as their fathers' had done in the years following the Civil War. Some of the gun battles were fantastic—even by today's TV standard where hundreds of shots will be fired in a 30 minute western film and only the villain and maybe one or two of his henchmen will be shot. Alas, it is all too true... they couldn't hit the broad side of a barn!



FULL TARGET STOCKS

For all popular guns, .22 Autos, Revolvers, .45 Auto. Full precision custom carving to individual requirements. Absolutely no mass patterns used. Every pair carved singly to shooter's exact needs. Finest walnut, finest finish and checkering. Left or right handed.



HANDLOADERS or FIELD STOCKS

Made for most all Colt's and Smith & Wesson revolvers . . . shown here on the S&W .45 Mag. Designed especially for heavy recoil loads. Herrett's design redistributes recoil to palm of hand relieving the painful strain between thumb and trigger finger. Each pair custom fit to your requirements.

DELIVERIES WERE NEVER BETTER

Write for FREE BROCHURE containing all information



WALTHER PISTOLS, ETC.

1. Double Action Feature: Simply release the safety lever and pull trigger as with a revolver. After the first shot, the Walther performs automatically, ejecting a fired shell, loading a new cartridge in the chamber and leaving the hammer cocked for continuous single action shooting. (If double-action is not needed on first shot, the hammer is cocked in usual way).

\$62,50

WALTHER

PP MODEL

(blue or nickel)

WALTHER

(blue only)

PPK MODEL

WALTHER

(blue only)

PP "SPORTER"

Calibre .22 L.R.....

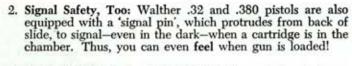
add \$10.00 for nickel

Calibre .32 ACP 57.50

Calibre .380 ACP 57.50

Calibre .22 L.R. (blue) \$64.00 Caliber .22 L.R. (Lightweight) .. 74.00 Calibre .32 or .380 (blue) . . . 60.00 Calibre .32 (Lightweight) 70.00

Unexcelled accuracy. Choice of 6" or 8" barrel. Adjustable target sights. Matted receiver. Same absolute safeties as with all Walthers. Extended pistol grip with thumb rest. Ready - Reliable - Safe! Ideal for target, game & plinking.



- 3. Inside Safety: Made of SOLID STEEL and stays between hammer and firing pin until the very last split-second of the trigger pull, when it unblocks the hammer, allowing it to strike firing pin. This safety works whether the outside safety is 'on' or 'off', thus preventing the possibility of many 'accidental firings'.
- Outside Safety: Lever safety which can be moved easily with thumb of shooting hand. Locks firing pin, and makes it safe to load pistol with safety 'on'-by working the slide without necessarily cocking the hammer-for possible double-action optional firing.

THE P. P. means Polizei Pistole, originally designed for police use. Used by many Law Enforcement Officers, Special Guards, Hunters, Campers, Home Protection as a Side Arm, either concealed or exposed.

"Note the above unsurpassed safety features of these worldrenowned pistols before you buy any pistols."

WALTHER PISTOLS by Smith
This book is a must for owners of Walther
Pistols. The P.P., P.P.K., famed P-38, etc.
are fully covered. Detailed functioning,
stripping and operation, with full ammunition and safety dope and a short hisktory of the Walther works makes this
the standard reference on Walthers.
\$3

P.P.K. means Polizei Pistole Kriminal, indicating that the P.P.K. is generally used by Law Enforcement Officers when not in-uniform who need a smaller version of the P.P. which can be readily concealed. Same features as P.P.

LOOK! LOOK!

Phoenix has designed and now offers the below leather Walther belt pouches. These pouches will be de-sired by all owners of Walther Pistols as well as those now buying Walther Pistols, Phoenix makes it possible for you to carry extra mags, and ammo on your belt. Quite an advantage!



Magazine Belt Pouch to hold two PP or PPK extension mags. (Can also be used to hold standard mags.)

Price \$3.60 each No. 35 same as above but for "PP" Sporter

Price \$3.80 each



No. 25

Ammo Belt Pouch to hold one 50-rd commer-cial box of either .32 Auto or .380 Auto am-munition.

Price \$3.25 each



No. 23

Ammo Belt Pouch to hold three (3) boxes (50 rds per box) of .22 calibre Long Rifle Ammunition.

Price \$3.75 each

ADDITIONAL ACCESSORIES FOR WALTHER PISTOLS

Holsters with pouch for extra magazine, each\$4.95
Holster Belts, each
Extra Mags for PP and PPK, standard, for .32 and .380
Mags for PP and PPK, with finger extension, for .32 and .380
Mags for "PP" Sporter Model, each 8.70
Add 10% for PP nickel-plated magazines

AMERICAN-MADE AMMUNITION for WALTHER PISTOLS

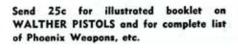
(per box 50 rds)

.22 LR, solid point \$.70

.380 Auto 3.80

All prices F.O.B. College Park

Md. Residents Add 2% Sales Tax





PHOENIX INTERNATIONAL CO. COLLEGE PARK, MD.

AMERICA'S FUSSIEST SHOOTERS

(Continued from page 29)

Minute-of-angle, which translates itself into one inch per hundred yards, has always been considered fairly good accuracy. But a bench rest shooter screams about a "flier" when he gets a shot outside of an inch at 200 yards; Sam Clark, Jr's 200-yard record is .5276". This has put a terrific pressure on barrel makers, forcing them to achieve near perfection in a rifle tube. Today we have new types of barrels. They are different from the old barrels of target Schuetzens which owed a good part of their accuracy to the fact that they shot black powder and soft lead. They were of soft iron, with practically no vibration, and had rifling so smooth that even with the equipment of today replacing the painstaking handicraft of yesterday, you could hardly expect to achieve a smoother rifled barrel.

Today it isn't easy to achieve as smooth rifling with our modern chrome moly, vanadium alloy, or stainless barrels as it was with soft iron before. But with bullet velocity being raised from a black powder 1300 feet per second to a nitro powder 2800-3400 f.p.s., a barrel alloy that would stand the erosion of hot powder and a bullet travelling so fast raised a lot of problems in making an accurate barrel. Although some of the most accurate barrels are still made by grandfather's cutting methods, broaching was heralded as the thing in rifling a few years ago. Lately it has in many instances been supplanted by button rifling. This is quite a step forward. Instead of gouging out metal by a scraping cut, button rifling is finished by actually swedging the rifling grooves into the metal of the bore, without removing a shaving. This sets up terrific stresses which have to be carefully relieved by slight heating, after which the barrel is straightened. But it does leave the bore with a hard, erosionresistant, microhone finish previously unattainable.

Erosion is still critical, and in part this accounts for the fact that shooters try to make shot groups and not just hit target centers. The sighting shots necessary to put a new scope or sight combination on the target center at the different ranges would burn off the "gilt edge" of many a valuable barrel long before serious shooting started.

Bench rest cartridges are about as hot a group of loads to be found. They are not loaded with consideration to total energy, like hunting bullets, but velocity is certainly required. A fast bullet is less affected by wind than a larger bullet, while "drift," the motion of a bullet to the right or left depending on the twist of the rifling, is also less with light bullets.

The .222 Remington has proved to be unusually accurate, even in factory loads. Sam Clark won the 200-yard Aggregate and Match Aggregate at the NBRSA national matches with a .222. Another caliber for bench resting is the .219.

The .219 Donaldson Wasp is one of the most important bench rest rounds. Designed by rifleman Harvey Donaldson, this version of the Wasp is actually a short version of the .219 Zipper Improved.

Most of the .222s are using as much

velocity or more than the .219s and are also getting shorter barrel life. The.222s are a standout in accuracy for either range, but case life with the .219 Donaldson is longer, and barrel life is somewhat longer due to the .219's longer case neck. Barrel life is more a matter of bullet fit to groove diameter than anything else. Those who use .2238" barrels with .224" bullets get upwards to 5000 rounds. Those who use .2242" barrels for .224" bullets are lucky to get 2000.

What there is about the Donaldson load that gives it the edge is hard to explain briefly, but so far it is in the top category of 200-yard cartridges. In the same class is the .22/250, which is the .250/3000 case necked to .22" caliber. This is by far the most popular of the varmit cartridges, and picking off old Mr. 'Chuck at long range has a lot in common with pin-point accuracy in bench resting. The .22/250 lends itself easily to reloading and also to working through a repeating action, which of course is of interest

JEFFERSON ON HUNTING

President Thomas Jefferson once wrote: "You must give two hours a day to exercise . . . as a species of exercise, I advise the gun. While it gives a moderate exercise to the body it gives boldness, enterprise and independence to the mind. Games played with the ball are too violent for the body and stamp no character on the mind."

to shooters using this cartridge for chucking as well as bench resting.

The .220 Winchester Swift is the first of the varmint cartridges to attain 4000 feet per second, and is still one of the most popular varmint cartridges used also in bench rest shooting. The ammo is made by Winchester and the Model 70 is chambered for it. The Model 70 Bull Gun has an appeal to the man who wants a factory gun and ammo for precision target shooting, but unless very carefully hand-fed, this combination won't keep up with the more specialized bench rest equipment.

Available recently in the light Marlin 336 lever gun, and long a favorite for crowpopping and other varmint removal in the Winchester Model 64 lever gun, the .219 Zipper has also been seized on by bench resters and given a lesson in accuracy through handloading. A rimmed case, it is very suitable for a single shot action, like one of the old Winchester Hi-Walls rebarreled, or one of the new Hauck custom single shots. In the proper action, tightly breeched, the Zipper will make groups small enough for the most exacting shooter. Yet no matter how good one cartridge seems, somebody will have his own pet, and one "far superior," in his own mind. Some of the old light wildcats are still standbys of current shooters: the .25 Neidner and the .25 Krag.

Now that 300 meters has come to be a

standard bench rest distance, the 6.5 mm bullets have been worked with in necked-down cases, including the .257 Roberts, .30/06, .30/40 Krag, and almost anything else that might be tried in hopes of obtaining this minute of angle accuracy at longer and still longer distances.

Winchester and Remington have brought out two cartridges which possess good bullet weight together with high velocity suitable for long-range shooting. The .243 Winchester and .244 Remington will be very interesting loads for experimenting by bench rest shooters, for a heavy bullet is the prime requisite of three- and four-hundred vard shooting. Coordinating bullet design with experiments in rifling seems to put no theoretical limit to the long range accuracy possible. I know of one special rifle in .22/250 with a 12-inch twist shooting 63 grain bullets that has maintained % minute up to 300 yards. When you are getting this good, there is only one way to go-farther out from the muzzle.

There is a fly in the gun grease: these cartridges. Where do you get them? Not over a gun shop counter, that's for sure. Barrels are precisely made, but there is no more carefully put together package than a single bench rest cartridge. Most bench rest matches are won these days with bullets carefully handmade in bullet swedges which are iewels of mechanical perfection, made to produce bullets which are the proper diameter for use in the owner's barrel. But some exceptional accuracy has been obtained with commercially manufactured bench rest bullets, where the shooter's barrel happened to be of a groove diameter best suited to the diameter of the bullets. Noteworthy among these are the Speer bullets used by Ronnie King in the 1955 National, when he shot a .185 5-shot group.

In arranging the components for loading, bullets are first to consider: spin them for concentricity, weigh them to the balance of a hair, check that points are true, not battered in shipment. One man makes his super-accurate bullets with a tiny hollowpoint. Why? "I dunno," he says, "they shoot better that way." Nearly all bench resters have portable hand-loading labs set up in their auto trunks, for assembling their pet cartridges right at the range.

Powder balances must be checked: accuracy means doing the same thing exactly the same way each time. Uniform powder charges must be loaded for uniform grouping, but before you can settle on one load. there comes a time of experimentation for each rifle and the individual way you shoot it. Nothing will replace shooting to find the right load for your rifle, whether it be hunting rifle or match-grade bull gun. Cases must be weighed, trimmed, checked for eccentricity along with checking the shapes of bullets. Seating depth must be carefully regulated, and of course cases must be fireformed to your rifle chamber before any practical experimentation can occur. Each gun of whatever caliber has its own individual traits and what may give perfect grouping in one man's rifle may be poison in yours. But this doesn't mean that another man's work should be ignored. Rather, information on one good load in the same caliber as your rifle gives you the groundwork for developing your own most accurate powder-bullet-case combination. And the last item makes it all for naught if it is wrong: the primer.

Primers used by the winner of the 100 yard Aggregate at the 1955 National were of a type which had not yet appeared on dealer shelves. In many instances the bench rest range is the testing laboratory of new products. Speer and Federal primers seem to be chosen by many top shooters over Remington and Winchester primers. Why is a question maybe you can answer when you start working up your own bench rest cartridges.

Of course, you have to have barrel and cartridge to shoot, but that isn't all to a bench rest gun, not by a long shot. Stocks are weird and wonderful, and intended to affect barrel performance as little as possible. These stocks are just that: sticks. Pieces of slabbed lumber, flatted at the foreend to go across a rest of some kind, and the toe of the heel is flat to drop on the sand pad. Sometimes an adjustable butt plate is fitted. All this is held off the ground by a sturdy, vibrationless wooden or cast concrete bench. The shooter is nothing but a gun pointer; that 20 pounds of rifle and scope sits squarely on a

To avoid warping and consequent changes in the action bedding, laminated stocks on the order of plywood construction are often used. The contrary grain of the different woods tends to resist any moisture movement and such stocks are proved to hold their zero better than stocks made all from one piece of wood.

Pedestal rests are highly varied with many designs on the market. Ted Holmes, Gene Beecher, and Pride all make them. Rigidity is all-important in choosing one for your shooting kit. Scopes come last but not least. High power scopes with sun shades are the rule for all bench rest shooting, since accuracy at the tiny target can only reflect how well you see to aim.

Bench rest shooting is not so specialized that only the "longhairs" of the shooting game can play. A doctor friend, near retirement age, owner of some 60 rifles, was induced to try his skill with a bench rest rifle. He had never shot ten shots into closer than 11/4" at 100 yards, but on his second attempt with a specialized bench rest rifle under the watchful eye of an experienced bench rester, he shot ten into .420" and shook his head after each of the last four shots, spotting each shot through his scope and muttering, "I can't believe it, I just can't believe it." Aftermath was as might be guessed, for he has now sixty-one rifles, and the last one is a new bench rest model made up for him.

Bench rest shooting is a fine test of man and musket, and new rules setting up separate classifications have widened even more the popular scope of the sport. Now ordinary sporting rifles can be used, or weapons which have a field application as varminters or deer and antelope rifles. The heavy special bench rest rifle will still hold the records but within their classifications, the lighter sporters give every rifleman a chance.

Records which were based on 1/16" measurements a few years ago have been displaced by new records measured in tenthousandths of an inch. The ultimate in accuracy will never be attained, for each year it will consist of closer shooting, farther and farther away-the limit is nowhere in

Peep Sights for Redfield and Buehler M Nipples for Cap & Ball Revolvers....... At your Dealers or-

LEARN GUNSMI

Creat opportunities—Operate YOUR OWN SHOP! Learn easily with Country's most complete ele-mentary and advanced course. Approved for Korean Vets; low tuition. Write

PENNA. GUNSMITH SCHOOL 1000G Western Ave. Pittsburgh 33, Penna,

BIG CATALOG-UP-TO-DATE! Listings of "eld" books as available Largest selection. Send 50c for both Free books & premiums. 5844-M Gersten . Philadelphia 19, Fa.

FOR SALE

MINIATURE CANNONS **BORED & VENTED**

BRASS BARRELS FROM S6 to \$15 PAIR

- Send for List -LENKEL

812 Anderson Ave.

Palisade, N. J.

BE A GUNSMITH

Good gunsmiths are in great demand. You can have your own business as a gunsmith, or work as a gun-smith in other shops. Graduates located in 48 states and three foreign countries. Veterans veteran—Veterans Administration approved to 16, 246, 550, 4, 894.

For Free literature write!

COLORADO SCHOOL of TRADES INC. 8797 W. Colfax Ave., G. Denver 15, Colorado

DISPLAY YOUR GUNS

Display and protect your guns in a smart cabinet suitable for any room or den. Made of Select Kiln Dried wood; expert workmanship; Beautiful hand rubbed natural finish. Large roomy drawers for equipment, etc. All doors and one drawer under lock and key. Hardware to match each cabinet. Choose from Solid Cedar, Walnut, Cherry, Knotty Pine and Poplar with Maple finish.



72x42x18 holds 12 guns \$220.00

72x36x18 holds 10 guns \$190.00



72x42x18 10 guns \$225.00

72x36x18 \$200.00

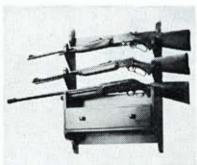


72x24x12 4 guns

\$120.00

72x36x12 8 guns \$150.00





3 gun size\$13.95 4 gun size\$14.95 Drawer Lock \$1.00



Rack Complete With Locking Chain in above woods

\$21.95

U-Make-It kit complete. Just glue & nail. Finish or paint as you desire. In Pop-\$13.95 lar & Pine only.

GREATER PRODUCTS CO.

MIFFLINBURG • 3 • PENNSYLVANIA

No C.O.D.'s Send for our circular

Something New — The HIDE-AWAY HOLSTER

This is what they see



This is what you know



GOOD new thing . . the HIDE-AWAY HOL STER, for law officers, gun enthusiasts everyone who wants a really practical, conven ient HIDE-AWAY holster for a personal gun. Handerafted

specifically fit any type hand gun you request.

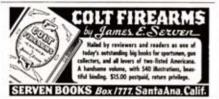
In-

visible when you want it to be. Doesn't bulge, kick your ribs or wear out your leg greasy shirts or rusty guns Weighs only 21/2 ounces, has riveted nickel clip for long wear. Fitz inside trouser band. Made of highest quality top grade leather. All sizes, makes and models. Send your weapon make, barrel length and caliber with \$2.95 for postage prepaid shipment. On COD, you pay postage. Dealer postage. Dealer inquiries invited.



Dept. H. **B&J** Leather Goods Co. P.O. Box 990 Brownsville,

Texas



SUBSCRIBE TO **GUNS TODAY!**

PATENT INFORMATION
Book and
INVENTOR'S RECORD
without obligation GUSTAVE MILLER

REGISTERED PATENT ATTORNEY ASSOCIATE EXAMINER U.S. Pat. Off. 1922-1929 Patent Attorney & Advisor .S. Navy Dept. 1930-1947 PATENT LAWYER

HOW IT BEGAN

TRIGGER Many early European gunsmiths were natives of Germany and Holland. So it is natural that some of their long-lost words should still cling to parts of weapons which bear little resemblance to those they made.

Mechanical devices to discharge a gun were probably perfected in Holland. It was found that the cock, holding a flaming wick, could be held in striking position for speed in release. Inspiration for improvement probably came from the snib of the cross-bow. Adapted to firearms, it became a curved lever with which a gunner tripped his firing mechanism.



From trekker, their word for "a thing pulled," Dutch workmen gave that title to their invention.

English were quick to borrow the device for tripping fire, but stumbled over its odd name. Until 1750, most accounts referred to the little gadget as the "tricker" of a gun. Changes in spelling caused the name to take the form now familiar throughout the world.

Unlike the cross-bow which inspired it, the modern release mechanism permits repeated split-second firing. Consequently any person who acts impulsively is likely to be described as "quick on the trigger." And a professional gun-slinger who knows nothing of the history of his weapon may be designated as the "trigger" of his gang.

0 0 0

BLUNDERBUSS Dutch hand-guns of the earliest type were hardly more than reinforced pipes plugged at one end and equipped with touch-holes. It was natural for the maker to call such a weapon a donderbuss-or "thunder tube.'

English borrowed the name but soon modified it to blunderbuss. For generations, the sonorous label was applied to any short gun of large bore which was loaded with slugs or assorted scrap metal. Sometimes made of



brass and elaborately engraved, the blunderbuss was formidable in appearance but comparatively ineffective. Coach guards frequently carried them, but even at close range the weapons were likely to miss highwaymen at whom they were fired. So more than one model was equipped with a spring bayonet for use when the shot proved ineffective.

Even in the heydey of the weapon, it was a butt of many jokes. It became customary to compare it with a human braggart who looks tough, but puts up a very poor fight. By the 17th century, any noisy talker was scoffingly called an "old blunderbuss." WEBB GARRISON

WORLD'S MOST POPULAR HANDGUN

(Continued from page 21)

the company. Mr. Meecham, who was treasurer of the Pioneer Breechloading Arms Co., hesitated at first in placing confidence in me, owing very likely to my age. I was 24 years old. There were about 60 hands employed. I afterwards had a foremanship in Singer (Sewing Machine Co.?) and several other places."

His first patent for a bullet grooving machine was issued on July 21, 1874 and this was followed by many other innovations in the firearms field.

Borchardt was versatile indeed, but it appears that his many patents added few coins to his coffers for he was constantly changing jobs and addresses. His part in the Sharps-Borchardt rifle production was his greatest achievement before foresaking his adopted country for Germany where he remained for the rest of his life. He did not, however, give up his American citizenship.

The Borchardt pistol was first produced in Germany in strictly limited numbers as early as 1893. An ungainly weapon, with the toggle and spring housing extending far to the rear, and an awkward pistol cartridge paved the way for later developments in automatic ammunition design, and is still used today in almost unchanged form as the powerful .30 Mauser pistol cartridge. The gun itself was the first commercial self-loading pistol which functioned regularly and effectively. For this reason it managed to struggle along for several years until Georg Luger took it in hand.

It has been rumored that Borchardt and Luger first met during the latter's trip to the U.S. where Luger offered a rifle for government testing. Before both Army and Navy boards early in the 1890's, Luger demonstrated a "rotating bolt, central underreceiver magazine rifle." This rifle, in lieu of evidence to the contrary, was most likely the early Mauser 1889-92 model put out by Loewe as they controlled the Mauser firm. Luger's later association with the Loewe firm suggests that he appeared in America as a

representative of that company. In 1894, the first definite link between Luger and Borchardt was documented. Luger exhibited a Borchardt pistol, before the U.S. Naval Ordnance Board as a representative of Loewe. The Navy did not approve the gun.

In late 1896 Ludwig Loewe reorganized under the name of the Deutsche Waffen and Munitions Fabriken (DWM), absorbing the ammunition firm of Deutsche Metallpatronenfabrik of Karlsruhe (DMK). From that time onward the new firm took over the production of the Borchardt pistol, stamping them with the new interlaced cypher of the initials DWM.

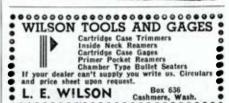
Luger was employed by the new firm. Within six years he achieved the distinction of having his name attached to the Borchardt pistol, through a series of modifications by him to cartridge and pistol design. Although it might be assumed that he held the position of chief engineer, a German source dating from an obituary of Luger in 1923 gives a slightly different credit at the time of Borchardt's association with the cartel. Borchardt at the time of the "Luger pistol" is definitely characterized as "Oberingeneur" or chief engineer, and Luger as being "in erster Linie Konstructeur war," which indicates he was employed as a designer. There





FRED THACKER 444 Cortex Dr. EL PASO, TEXAS







STITH DOVETAIL MOUNT

The only standard mount that positions scope forward or back to suit stock crawler, shotgun-style or average shooter.

Split-ring mounts same price in all sizes: ¾", 18", 1", 1.023".

\$15.00 complete (Special Sako & Brno mounts, \$20.00)



STITH MOUNTS

FREE folders on Scope Mounts and hunting equipment

Gardiner Custom Bullets

6 mm. (.243 diameter) Spitzer soft point, Precision made. Uncommonly accurate. 80, 85 and 90 grain weight. Priced \$4.20 per hundred, postpaid. Prompt delivery. Free bullet on request.

ERNEST L. GARDINER

Bullet Jacket Specialist

422 Sixth St.

P. O. Box 1682

Rockford, Illinois

MOST AMAZING



He's a gentleman!"

Of all fur bearing animals is the NUTRIA! Perfect gentleman —no noise, no odor, very friendly! He eats fresh vegetation, rabbit He eats fresh vegetation, rabbit pellets, etc. matures at 8 months; multiplies rapidly and has (2 or more) wives — IE RAISES LARIGE FAMILIES. THE BEAUTIFUL FUR—makes NUTRIA valuable — resembles beaver — YOU can start smail and grow big. A TREMENDOUS OPPORTUNITY. NEW BOOKLET: "Facts that Can Make You RICH"—\$1.00 (refundable first order). Don't miss this one! YOU WILL BE DELICHTED!

DELIGHTED!

LUND'S NUTRIA RANCH 9725 Sunland Blvd., Dept. 39, Sunland, Calif.

NEW J. Dewey "THUMBSLIDE" TANG SAFETIES FOR ALL NEW CURVED RECEIVER REMINGTON SHOTGUNS & RIFLES



Mod. 760 Slide action rifles, Mod. 740 Auto rifles, Mod. 870 Wingmaster Shotguns, Mod. 11/48 and new 11/48 Sportsman auto Shotguns, New Rem. 22 cal. Model 572. Price completely installed at our plant is \$17.00.

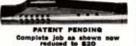
WRITE FOR FOLDER J. DEWEY GUN CO.

East Hampton

Connecticut







Streamline

MUZZLE BRAKE

Tiny, but POTENT! Custom-fitted to look like, and actually be, part of your rifle barrel. Write

PENDLETON GUN SHOP Pendleton, Gregon

WHOLESALE - RETAIL

GUNS • SCOPES Reloading Tools • Binoculars Cameras • Home Shop Tools Home Appliances • Outboard Motors • Boats • Tents Sleeping Bags • Archery Fishing Tackle

FREE CATALOG RAY ROUSH, Box 66, Hoagland, Indiana is no question that Luger was subordinate to Borchardt for a time, although later they might have shared the high office of chief engineer.

Early patents in the name of Luger show a design transition from the clumsy pistol of Hugo Borchardt to the sleek, well-balanced and natural-pointing weapon which bears the title of Luger. Briefly, the modifications of Luger took on three stages. First, the Borchardt handle and magazine was altered to a more acute pitch giving better balance. Then the Borchardt toggle and spring were rearranged and modified for compactness. Finally Borchardt's flat strip "clock spring" was abandoned and a superior coil spring used by Luger. Since Luger for some years was only a designer, the improved pistol was called by the chief engineer's name first: "Borchardt-Luger."

In the latter part of 1898, a series of pistol trials were held by the Swiss at Bern. The pistols entered were: Mauser with 10-shot magazine; Mauser with 6-shot magazine; Bergmann with 10-shot magazine; Borchardt-Luger with 8-shot magazine; Roth with 10shot magazine; and Mannlicher with 7-shot magazine.

Explanation, assembly and the firing of 50 rounds, in two series followed; then timing per firing of each weapon; target shooting, two frames each at 50 meters; endurance of 400 rounds without cleaning or cooling.

The Borchardt-Luger was noted as the only weapon in the endurance tests to perform satisfactorily. Then followed dust and water tests, the firing of 20 rounds each weapon, wherein the Borchardt-Luger was again the only weapon without malfunctions. Next the penetration into 8m/m iron plates at 10 meters was tested to determine velocities with the various powder charges. Finally occurred a discussion of performances without evaluation.

Of course the point of the greatest interest is the fact that the pistol is referred to as the "Borchardt-Luger." Its powder charge of .42 gram of Walsrode powder giving a muzzle velocity of 418 meters per second (1379 feet per second) would indicate that the pistol in question could have been either a Borchardt or possibly a transition piece chambered for the Borchardt cartridge. To further indicate that it could have been a true Borchardt pistol, the barrel is described as being "longer" than that of the Mauser entered in the same tests, which would jibe with the barrel length of 71/2" which is longer than the common Luger barrels.

A second series of tests were conducted in Switzerland the following year at Thun. The Mauser, Bergmann, Roth and Mannlicher pistols of the previous trial were retested. New models of the Mauser, Hauff and Browning were listed, as were a new Mannlicher and a new Borchardt-Luger, having been modified according to the wishes of the board. The 1899 tests were conducted like those of the previous year.

The Borchardt-Luger of the second tests was described as "made lighter in weight and fitted with a new safety." It is more than likely that this was the transition piece shown in Luger's patent drawings. This patent was applied for in the United States on April 29, 1899, two days before the second Swiss tests. The same patent was applied for in Great Britain on the same date. The powder charge listed for the newer pistol was .31 gram, with a velocity given as being 323 meters per second (1066 feet per second). From these figures we may assume that the later pistol was chambered for the 7.65 mm Luger cartridge or its experimental counterpart. These tests led to the eventual adoption by the Swiss government of the Model 1900 Luger in April of 1901.

The relationship between Borchardt and Luger (according to an observer who knew them both) was not at all a friendly one. It is reported that they visited the DWM plant in Berlin as late as 1918 but were not on speaking terms. This must have been an uncomfortable situation indeed as they lived for many years within a few blocks of one another. Exactly what caused the trouble between them is not definitely known. Maybe it had something to do with the fact that Borchardt's name appeared on none of the patents taken out by Georg Luger on the Luger pistol. Some of the features patented in the Luger bore striking resemblances to certain parts found in the Borchardt pistol.

Borchardt, after the inception of the Luger Pistol, continued to work with toggle action principles spending many years attempting to perfect a toggle action semi-automatic rifle which he hoped to sell to the German government. His last patent (U.S.#1,184,065-1916), granted a few years before his death, was a final attempt at perfection of this rifle. Borchardt probably held some stock in DWM. If not, it seems strange that he would have remained in Germany and merely puttered with many various inventions.

The Luger pistol, having outlived its patrons, moved ahead with continuous success and was one reason why DWM became one of the world's foremost small arms pro-

DWM was taken over by a large holding company after the First World War (1922) and for some years thereafter Luger pistols were distributed under the firm name of the Berlin-Karlsruhe Industrie Werke (B.K.I.W.). Between the years 1922 to 1932 Simson & Co. of Suhl, Germany supplied all of the Luger pistols used by the Reichswehr. On May 1, 1930, however, all Luger machinery was transported from DWM in Berlin to the Mauser factory at Oberndorf and from 1934 until production was halted in 1942 Mauser supplied the majority of Lugers produced. The mass migration included about 800 machines and as many technicians.

Other firms produced Lugers under license from the parent corporation. Among these were the Royal German Arsenal at Erfurt, which turned out large quantities of Lugers supplied to the German army during World War I. Simson & Co. and Heinrich Krieghoff, both of Suhl, made Lugers for police and naval use. Waffenfabrik Bern and Schweitzerische Industrie Gesellschaft (S.I.G. or Neuhausen) both in Switzerland turned out complete pistols and parts, amounting to about 50,000 Lugers for military and commercial use in that country. Vickers Ltd. of London made pistols for the Netherlands government about 1927, turned out on machinery borrowed from the Mauser factory which was not able to undertake the contract because of restrictions of the Versailles

These are only a few of the facts to be

unfolded in tracing the history of this fabulous pistol which has probably been produced in greater quantity than any other pistol since automatics first came into use in the latter part of the 19th century.

No fewer than 21/2 million Lugers were produced between 1900 and 1942. Over 95 per cent of that number went into the military service of Germany. The remainder were of either commercial manufacture or "contract" pieces made especially for the armies and navies of countries outside of Germany. At least 15 nations may be included in this latter category, among them the United States.

After exactly 30 years of military service in Germany, progress finally caught up with the Luger when in the 1930's other tests were held. Included were the latest products of such renowned arms manufacturers as Walther, who submitted the soon-to-becomefamous "Heeres Pistole" (better known as the P38), Sauer with their HP and Mauser with the streamlined HSV to mention a few. The results of these tests were the beginning of the end for the Luger. It was decided that it should be replaced by the P38. Switzerland, which since 1924 had produced its own, was quick to follow suit when in 1948 the Neuhausen, based on Browning designs, replaced the Luger in that country.

In the 42 years of its manufacture no less than 160 variations of over 20 different models were produced. Luger production throughout the world is now at a standstill. Ouite possibly it may never again be resumed. Should this prove to be true, all Lugers, especially the rarer ones, will increase in value and the demand will grow. No matter which course the armies of the world pursue, the Luger is now and shall always remain one of the greatest handguns in history.



The demand for these world famous handmade knives has become so great that at present I'm several months behind in deliveries. However, I refuse to lessen their quality by mass production.

Your patience will not go unrewarded. Send 20¢ for descriptions, prices and instructive manual. 50¢ for fighting knife booklet. W. D. RANDALL, JR., Box 1988-G, Orlando, Fla.



Federal Licensed 5565 S. Howell Ave. Dealer Milwaukee 7, Wis.

WHOLESALE!!

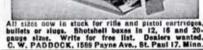
Guns-Ammo-Scopes-Sights-Accessories

ED AGRAMONTE, Inc. 201 Warburton, Yonkers 2R, N. Y.

FREE DEALER PRICE LIST

CARTRIDGE BOXES



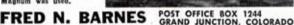


FOR THOSE WHO DEMAND THE BEST

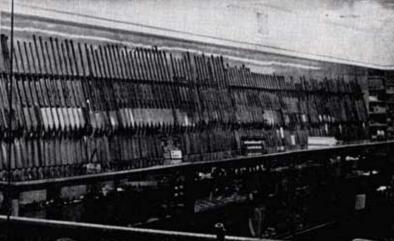
BARNES CUSTOM-MADE BULLETS AND **BIG GAME RIFLES**

Large bull elephant shown at right was killed by Charles Bazzy, Dearborn, Michigan, Cut shown of bullet is the 500-grain Barnes solid, which penetrated completely through elephant, breaking BOIH shoulders! A .450 Ackley Magnum was used.









One of the Largest Gun Displays in the Midwest



over 600 in stock, assures immediate delivery of your favorite make and model in the gauge or caliber you want. And whether you choose to visit RILEY'S or write us for quotations, you can also be sure of courteous treatment. Come see us soon—or write your needs today.

Exclusive Distributors of these famous NEIDNER Products

WE ALSO CARRY A BIG STOCK OF

- Scopes Mounts Loading Tools
- Reloading Components Accessories Dealer orders and inquiries invited on all shooting supplies.

P. O. BOX 36 • AVILLA, IND.

RELOADING AND SHOOTING SUPPLIES NATIONAL DISTRIBUTORS OF





Jewelry created by eminent sculptor. Cast in heavy pewter; silver plated; non-tarnish lacquer. Available as tie clip or ladies' pin.

> \$2.50 each, plus .25 tax Return if not delighted.

MERRYFIELD, BRISTOL 3, VERMONT Write for free leaflet.



KENFIELDS PRODUCTS, SAN CLEMENTE, CALIF.

DON'T ANNEAL THAT HARD RECEIVER!

Carbide Pilot Drills\$2.25 each Special Taps 2.00 each Special Drills 1.00 each

Stocked in #8/40 and #6/48. Others to order.

SUPERIOR, STEEL GRAVER BLANKS COLOR CASE HARDENING-48-hour service!

ALAMO HEAT TREATING CO. P.O. Box 7081, HOUSTON 8, TEXAS

LOOKS NEW-NOW MADE EAST Improved Minute Man Gun Blue Instantly preserves and renews steels and Iron surfaces—Not a paint of lacquer — No heating necessary — Comes complete with all necessary equipment. GUARANTEED—Tested and proven over 30 years by 1 repeat sales to satisfied users. SEND MONEY PACK CHARANTEE

MONEY BACK GUARANTEE NEW METHOD MFG. CO.

Name..... Address..... City..... State.....



THE REAL TRUTH ABOUT THE KENTUCKY RIFLE

(Continued from page 43)

Just to show that maybe it could hold a little closer, the Jaeger turned out a second group for Cleves Howell, who was firing. After he had put three shots into one hole measuring 1/2" center-to-center horizontally by 3/8" vertically, Howell quit while he was ahead. The load was 83 grains FFg, shot in a dead calm. Howell is an authority on the Whitworth rifle, once reputed for accuracy, but even he was astonished by the Jaeger group, one of the closest ever fired with this

The Pennsylvania flintlock was loaded with 80 grs. of FFg behind a 200 gr. pure lead ball, .500" in diameter and patched with pillow ticking. The center target was shot with this load. Center to center this group measures 13/8" horizontally by 1" vertically.

With the Hicks rifle, a 140 gr., .451" diameter ball was driven by 60 grs. of FFg. and patched with pillow ticking. Four shots of this group, the third target shot, can be covered by a nickel! The fifth shot, however, printed out of the group opening it up to 1%" horizontally by 1/8" vertically.

In measuring these groups the normal procedure of measuring from center of bullet hole to center of bullet hole for the maximum spread was used. For comparison the old time method of measuring the groups by a string was also employed. In this system the bullet holes are plugged by appropriate size dowels. a string is stretched around the base of the dowels, and then measured. This method does not allow for the difference in the diameter of the different caliber balls. However, the five shot groups for the Jaeger measured 61/4 inches by this method, the Pennsylvania rifle's group 5 inches, and the Hicks rifle group 4 inches.

The closeness of these groups compares favorably with modern hunting and target rifles. Such accuracy can only be obtained from rifled guns, which in contrast with the Brown Bess smooth-bores of the day made the American Kentucky seem so very precise,

Rifling as used in Kentuckies, of course, pre-dated the Pennsylvania gunmakers by centuries. The word is itself German in origin, "riffeln" meaning "to groove." And to old Germany we must go for the origin of that other important Kentucky contribution to accuracy, the patched bullet. The two go hand in hand-or "land and groove" -together to achieve the best accuracy.

The idea of rifling and causing a projectile to spin as it passed through the air was not new even as early as the 1500's, a few decades after the invention of guns. Both arrow and crossbow bolt spun for accuracy as they went through the air, and even the hand-thrown javelin was cast with a twisting motion to cause it to fly true.

A Pennsylvania gunsmith, Martin Meylin of West Lampeter Township, Lancaster County, is even credited with "inventing" the Kentucky, and the remains of his field stone gun shop, still extant after two centuries, is now a state memorial. Certainly Swiss-born Meylin, who apparently emigrated to Pennsylvania about 1710 when he was 40 years old, can safely be credited with building Kentucky rifles, but his guns were also like those he had made most of his life in Switzerland, the long, hunting Jaeger, or the short target Jaeger.

The long Jaeger most nearly resembles the small (.45 caliber usually) bore Kentucky, while the target Jaeger, used for shooting at a 6" bullseye at 125 yards, was established by target shooting convention as having a barrel not longer than 301/4 inches, nor a bore smaller than 24-gauge, about .60 caliber. All these guns were rifled. In the first scientific treatise on shooting, Benjamin Robins' "New Principles of Gunnery" (1742), the author stated:

"When the piece is fired, the projectile follows the sweep of the rifles (grooves) and thereby, besides its progressive motion, acquires a circular motion around the axis of the piece, which circular motion will be continued to the bullet after its separation from the piece, by which means the bullet discharged from the rifle barrel is constantly made to whirl around an axis which is coincident with the line of flight. Hence it follows that the resistance of the foremost surface of the bullet is equally distributed around the pole of its circular motion and acts with an equal effect on every side of the line of direction so that this resistance can produce no deviation from its line."

The established myth, echoed in recent books purporting to be basic references of firearms information, makes a claim that some Pennsylvania gunsmith "invented" the trick of patching the bullet, which allows the bullet to exit from the bore relatively undeformed and yet spinning, for the patch material has been "cut" by the rifling, imparting the necessary spin to the bullet it surrounds. This way of loading, which allowed undersized bullets to be pressed down Kentucky barrels in fast reloading as compared to the military muskets of the days, is looked on as a true "invention," while actually it was probably a simultaneous discovery of several gunmakers. Robins comments on great shooting festivals in which the system of patching the bullets was common:

"But in some parts of Germany and Switzerland an improvement is added to this (usual method of loading), especially in the larger pieces, which are used for shooting at great distances. This is done by cutting a piece of very thin leather, or thin fustian in a circular shape, somewhat larger than the hore of the barrel. This circle being greased on one side, is laid upon the muzzle with its greasy part downwards and, the bullet being placed upon it, is then forced down the barrel with the bullet, and by its interposition between the bullet and the rifles prevents the lead from being cut by them. But it must be remembered that in those barrels where this is practiced the rifles (grooves) are generally shallow, and the bullets ought not be too large.

While Robins was writing in 1742, by which date some rifles were already being made in America of the Kentucky type, much earlier references existed to this patched loading. In his recent book "English Guns & Rifles," the late J. N. George observed that: "The use of greased wads or patches in loading the rifle (have been) mentioned in the 'Arte de Ballesteria y Monteria of

Alonzo Martinez de Espinar,' first published in Madrid in the year 1644." This certainly established the date of the use of a patched ball for accuracy as long before the development of those graceful, beautifully-balanced Kentuckies.

Part of the patched bullet invention myth claims that the Jaegers were "military rifles of the Hessian mercenaries" and were loaded by using a mallet to hammer the bullet into the bore, and fit it tightly to the rifling by pushing it down part way with a short iron ramrod or starter. The existing rifles themselves prove the contrary; they are equipped with slender ramrods of cane or reed.

Certainly the Hessian "jaegers" armed, not with Jaeger rifles, but with German military flintlock muskets. Their effect on the design of the Kentucky was nothing at all.

In loading and shooting the Austrian Jaeger two distinct differences were noted that set it apart from the Pennsylvania rifle. First was the remarkably short lock-time of this particular piece-the time elapsed between squeezing the trigger and the firing of the charge as the flint sparked and the priming flashed. Fast lock time is an important aid to accuracy, and the double set triggers with which these rifles are almost invariably fitted, dating to the double set triggers on crossbows two centuries before, helps this fast ignition.

The second difference was an odd onethe short barrel made the Jaeger awkward to load. With the muzzle of the Jaeger just about waist high, it is rather difficult to lean over it to patch the ball. The "long Jaeger" would be easier to load. The muzzle of the long-barreled Pennsylvania flintlock is just about chest high for most men and is much easier to load.

I wonder if perhaps the longer barrels of the "Kaintucks" might not have been dictated as much by physical proportion of the customer, as by conscious considerations of balance without weight, and ballistic efficiency in burning the powder in the long barrel. After all, it was the short, stocky German gunmaker who produced the guns, but it was the long, lanky Scotch-Irish frontiersman who used it.

Comparing the size of groups with the Austrian Jaeger to those of a typical Pennsylvania flintlock, several conclusions may be drawn. The European rifles of the early 1700's were good, accurate rifles, as precise as the American of a few years later development. The Jaeger predecessor of the Pennsylvania-Kentucky rifle shot a patched ball with excellent accuracy. Finally, even the short-barreled Jaegers, with a relatively fast twist to the rifling, will shoot a patched round ball as accurately as the longerbarreled weapon with a slow twist.

These conclusions are important for they establish the direct connection between the principles which made the German-Swiss foresters such good shooters, and in turn became the basis of the dead-eye frontiersmen of the early days in America. They do not in any way detract from the fame of the Pennsylvania or Kentucky rifle. Rather, they serve to fix its line of ancestry and allow it to take a correct place in history as the distinctively American styling development of a typically German rifle, down the line from Jaeger to Kentucky.



Everyhing you want in a fine hunting riffe. F. N. Action, Boehler proof steel 24° octagon barrel, semi-ribbed and matted. Sheard bead in ramp and 48 Lyman rear sight. Choice of figured French walnut or buri-grade American walnut stock, finely checkered forcarm and P. G., style and length of forcarm as wanted. Genuine horn P. G. cap, Pachmay recoil pad or Neidher butt plate, QG swivels and Boyt sling. Wt. 8 lbs. Target with each riffe. Caliber .270, 7mm. .30-06 or .308 Win. Also. 300 H&H, \$12.50 extra. With Ajack 4x scope and Leupold or Jaeger side mount, fitted—\$85.00 extra.

\$220.00 (Without Scope & Mount)

\$196.00 (Without Scope & Mount)

for VARMINTS

CALIBERS: 22-250, .220 vift, .250-Sav., .270 or .257-

ACE VARMINT RIFLE

"Perfect Pair for Varmints". That's what sportamen from Alaska to Texas say about Flaig's Ace Varmint Rifie fitted with the big AJACK 7½ X SCOPE. Count these features: F. N. late style action, Ackley or Donglas medium weight 20" barrel, choice of Jacser or Mashburn adjustable trigger, selected Penna, or French walnut stock, (finely checkered, hand-rubbed oil finish). Flared genuine horn P. G. cap, QD swivels and silng. Weight without acope or mount 10% 10s. Price, (without scope or mount), \$196.00. With the big AJACK 7½ X 50 scope and Leupold or Jacser side mount, fitted—\$126.00 extra.

FRANZ-SODIA BARRELED ACTION

Because they are so reliably accurate, shooters 'in the know' demand Boehler proof-st barrels, made by Franz-Sodia of Feriach, Austria. 24" gradual taper, weight about 2½ il 1-10 twist-none finer! Choice of calibers, 25-,270-7mm-. 30. Price \$30.00. (OR fitted your barrel action, headspaced and test fired—\$10.00 more).

Note: Flaig's can furnish actions, barrels or barreled-actions to meet ANY requirements including ACKLEY or DOUGLAS chrome-moley barrels, in any weight or twist. Ask fo quotations on your needs.

FERLACH "OVER-UNDER" TURKEY GUN......\$330.00

Here's the ideal over-under for the sportsman who needs a combination shotgun and rife. Imported from Austria, the "Turkey-Gun" shown above is immediately available in 16-gauge and .22 Hornet or 16-gauge and .222. Other combinations, (and Ferlach Over-Under Shotguns) also available soon, Send 25c for illustrated FERLACH CATALOG, printed in Vienna.

We handle just about everything in the shooting line with specialists on hand in each particular hase of gunsmithing. We also restrict ourselves to the gun business and devote all our attention to roper service in this line. All orders and inquiries are given an immediate and courteous response nd we are pleased to quote special prices on request. Write for Free Catalog No. 25.

SERVING SPORTSMEN Alaig's Lodge Millvale, Pa. **SINCE 1934**

FRENCH WALNUT

ALSO INLETTED BLANKS WARWICK, NEW YORK

YOU-MAKE-'EM GUN KITS Full size finished product so authentic that it's difficult to tell it from the real thing!



VICKERY MODEL GUN CO. Post Office Box 93 Oak Park,

Oak Park, Illinois

OAKLEY & MERKLEY

California Claro Walnut

FINE GUNSTOCK BLANKS P. O. Box 2446

Sacramento, California







FREE BOOKLET Onder Total Whele House House! GET IN ON THE FUN NOW! Order a PIED PIPER from this ad, shart enjoying seciting hash in your favorite locale, as thousands of other toothmen are doing. Call is easy to blow, simple to use, clear instructions supplied.

A. L. LINDSEY BROWNWOOD 3, TEX.

SMILEY CASE TRIMMER #55

WITH THE NEW PRESS-FIT PILOTS
THE LEADER IN DESIGN, PERFORMANCE,
AND VALUE.
FOUR NEW MODELS NOW AVAILABLE

The only case trimmer made that trims and deburrs both inside & outside in one operation—The fastest & lowest-priced complete trimmer. One stationary collect takes all cases—Guarantsed. No other trimmer can compare in speed and performance. Test all.

FREE FOLDER

G. T. SMILEY COMPANY

Box 54 Clipper Gap, California

TELESCOPES

Spotting and Telescope objective lenses. Terrestrial and Celestial eyepieces. FREE LITERATURE.
REVERE INSTRUMENT COMPANY 5830 Hollywood Blvd., Los Angeles 28, California





NOW you can have your own portable target holder for rifle or pistol.

Set up anywhere outdoors where there's a suitable backstop. Targets clip to holder. Accommodates targets 14" x 14" or smaller. Lightweight. Adjustable height for rifle or pistol shooting. Quickly taken apart for easy storage in car trunk, etc. Made of sturdy steel. Extra paper targets included.

Only \$3.98 postpaid

Dealer inquiries invited

MAR-TECH PRODUCTS MFG. CO.
P. O. BOX 383 COFFEYVILLE, KANSAS

THE GUNS OF TEDDY ROOSEVELT

(Continued from page 34)

lowing a term as president of the police board of New York City, Roosevelt showed an interest in modern arms. Many police departments were still armed with obsolete Colt revolvers, either percussion or converted years before to metal cartridge. T.R. worked with the Colt company in the development of an improved .32 "Colt's New Police" revolver. While this new model gun was of the double action principle, T.R. obtained 20 such guns, single action only. They were not considered any advantage and the double action pattern was eventually approved as "issue." Nowadays of course .38s are the smallest size service revolver ordinarily issued.

His return to politics after the war raised consternation in some political circles. This burly man with the weak eyes who could out-ride, out-run, out-shoot and out-fence them politically was too dangerous a person to many politicos to let run loose. They buried him in the job of Vice President, that post of supposed honor where political troublemakers can be put on ice for four years. To Roosevelt's good luck, and to the eventual benefit of the nation, he became President by a fluke none of his opponents could have foreeseen. President McKinley was assassinated in 1901 and Roosevelt served out his term.

Roosevelt's policy of "speak softly and carry a big stick" made the United States a respected power in the world. He sent the "Great White Fleet" on a good-will tour of the world and aired American might for all the world to see-and beware. When he stepped down from office after five years, having served an elected term under his own colors, Roosevelt had made of growing America a muscled giant looked on by all nations as one to respect, much as he had himself in childhood built up his weak body through exercise and rugged outdoor living. The directness and sportsmanlike code resulting from his life on the frontier had worked as well in public life as it had in his private life.

During his last year in office, Roosevelt began to plan an extensive African hunting trip with his son, Kermit, where they would gather specimens for the Smithsonian Institution. His past experience with Winchesters prompted Roosevelt to get the company's latest (1908) catalog. Winchester recognized that the President's interest in buying their guns was exactly like the English gunmaker's coveted "By appointment, Gunmaker to H.M. the King." Winchester Bennet, vice president of the company, took personal charge of Roosevelt's needs.

The President's tentative choice of weapons was written to the Winchester Company in June of 1908. "What I think I would like would be a .30-40 (which would be Roosevelt's way of describing the Model 1895 in which this caliber was made) shooting the same ammunition I use in my Springfield, and two .405 caliber rifles (Model 95) . . . My son will bring in his .30-30 Winchester (Model 94) to have the sights and stock duplicated unless we decide to have the front sight with a gold bead. In addition I shall take my .45-70 take-down Winchester (Model 86) which certainly ought to be good

for lion, zebra, and the smaller antelopes in the bush; and probably a double-barreled .450 cordite English rifle.

"Your rifles will be shooting in compecition with the latter so I want to be sure they are good ones I have been warned that (the .45-70) is not right for African game, I am rather inclined to doubt this. How will the penetration of the full metal covered bullet for this .45-70 rifle compare with the penetration of the similar full-jacketed bullet for the .405? Have you any data which would show how this .45-70 would do on African buffalo and rhino, for instance. I should use the soft nosed bullet for lion, for I do not believe that a lion is a tougher animal than a moose or a bear. As I have said to you, I do not want to use any one of our American guns for any one game for which it is unsuited, because there will be a good deal of attention attracted to my trip and I want to be sure that it comes out all right."

The paper ballistics of the .45-70 in some instances were hardly half those of the .405, and the company had little difficulty in persuading Roosevelt that his success in killing moose and bear with the .45-70 was more because of his skill in hitting a vital spot, than in the superiority of the bullet for such game. It was decided that the company should supply two Model 95's in .405, and one in .30.

There was some confusion at the factory concerning the .30-30 Model 94 and the Springfield rifle Roosevelt sent to them as models of stock and finish. The Springfield rifle built at Springfield Armory for Roosevelt in 1903, was a very unusual weapon. It had been made to his order by direction of General William Crozier, then chief of ordnance.

In 1903 a brand new model of rifle had been designed and adopted to supplant the several hundred thousand Krag rifles and carbines on hand. Although generally known as the "Model 1903" this rifle differed in several ways from the rifle now familiarly known as "the '03 Springfield." Original models were fitted with a wire bayonet which pulled forward from a cavity beneath the barrel, and was held by a spring catch. Roosevelt wanted one as a sporting weapon, so the very first "Springfield Sporter" was built. In some respects a Winchester was the prototype: "I have sent you over my Winchester rifle," wrote Roosevelt in 1903 to General Crozier, "so that you may have one of the new Springfield carbines made like it for me. I want the sights reproduced exactly. If necessary they can be obtained from the Winchester company. I want the butt just like my present butt, only one inch shorter."

A Springfield Model 1903 was selected from the first batch in progress and given the serial number of 0009. The top of the receiver was cross hatched, as was the barrel to the rear of the sight. A Winchester Rocky Mountain Buckhorn sight was fitted, with the high "horns" flattened off. A Kragtype front sight base was fitted, bearing a Winchester gold bead sight. The stock, held at the front by a carbine band and spring, was checkered in a simple pattern, and the

pistol grip was a long, sweeping curve which Roosevelt liked, with the point of the comb rather far back. Plenty of butt plate helped absorb the gun's kick on the Presidential shoulder, but even Winchester couldn't figure out anything to take up the Presidential kick. Roosevelt came pretty near blowing his stack as he surveyed the '95s which had been fitted up to his desires.

"I am really annoyed at the shape in which you sent out those rifles. I return them to you, together with my Government rifle, so that you may have before you the stock and sights I use. I had already sent you, as you of course remember, rifles showing my sights; yet you sent out these rifles with a rear sight which does not pretend to be like that I use, and which taken with a front bead, I regard as the poorest rear sight ever used for game, the one with the sharp, narrow notch.

"It was entirely useless to send them out to me in such shape. Moreover, while the two .405s were sighted accurately, the .30 caliber shoots about twelve inches high and six inches to the left; and moreover, extraordinary to relate, its rear sight is actually different from the rear sight of the two .405s, and if possible, worse. I cannot see what excuse there was, when I had already sent you the rifles as models, for you to send me rear sights such as there are on the three guns you sent me."

Roosevelt's .30-30 Model 94 was stocked differently from his Springfield bolt gun. He liked the Winchester, although the lever operation required a slightly shorter stock than the bolt operation. He also had the Model 86 in .45-70 caliber, the stock of which was not entirely to his liking, but apparently the Model 86 sights were all right. And so the confusion mounted to the point where Winchester Bennett sent the President a note rather pointedly calling his attention to the stock differences, and saying: "Now, we have the stocks practically made up according to the dimensions of the .30-30 but if you desire, we will start all over again and copy the stock on the Springfield gun."

Winchester's gunsmiths started over again, and altered the stocks to Roosevelt's wishes. Comparison of the Model 95 used by Kermit in Africa shows how closely, within the limits permitted by the necessarily straight stock of the lever-action Winchester, that stock follows the lines of "my Springfield gun." After much fooling around, which too-polite Winchester officials never even hinted might have been the President's natural-born bullishness, Roosevelt finally had a good word to write.

"The rifles have come," dictated the President from the White House that December. "They are beautiful weapons and I am confident that they will do well." Later he followed up with further praise: "I cannot say how much I like those two .405 rifles you sent me. Now, my belief is that in Africa those will be the two rifles my son and I will habitually carry in our own hands; the rifles upon which we will most depend. As this is so, I think I should like to have you make me a third rifle, a duplicate of these two. If you have any difficulty about the Silver pad of the full thickness for this you might make it a little thinner. Could you make me a duplicate of these two rifles in time for me to take it out to Africa next March? I would probably leave it at some central point, say Nairobi, where I will make many preliminary hunts; but it would be a good thing to have it as a kind of insurance against accidents. . . ."

In Africa, Roosevelt found the Winchesters valuable rifles for veldt and forest. Either the Springfield or one of the .405s accompanied him everywhere. For the heaviest animals, rhino and elephant, Roosevelt finally succumbed to the inescap-

JAP 7.7 MM GUARD SCREWS

25c each, \$2.50 dozen. Minimum order, \$1.00.

Stamped, addressed envelope for

BOB LOVELL, BOX 401, ELMHURST, ILL.



For Hits Instead of Misses INSTALL A PREMIER RETICLE IN YOUR RIFLE 'SCOPE!

PREMIER

FEATURES



THE RETICLE MAKES THE DIFFERENCE

CUSTOM-QUALITY AT LOW, LOW

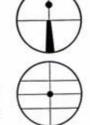
PRICES

* MICRO-FILAMENT CROSS LINES.

- * PERFECTLY ROUND DOTS.
- * UNCONDITIONAL LIFE-TIME GUARANTEE.
- * INSTALLATION IN ANY RIFLE 'SCOPE.
- * FAST 2 to 3 DAY SERVICE.

BENCH REST SHOOTERS . . . The trend is to dots!

PREMIER can supply dots as small as 1/8 minute for use in your High-Power 'scopes.



For standard PREMIER Dots, Tapered Post, Regular Cross-Lines, and Extra-Fine Cross-Line reticles, installed in your 'scope, prices are as follows:

*Tapered Post or Regular Cross-Lines in Weaver 'Scopes, only \$5.00. Regular Cross-Lines in Mossberg, Weaver Models B, G, 330 or 440, Ranger and other inexpensive 'scopes, \$3.00. All prices are net, F.O.B. factory. Include postage and insurance with order.

FREE: 3-Color, 4-Page Brochure describes custom and standard PREMIER RETICLES, write

PREMIER RETICLES:

8402 Fenton St., Silver Spring, Maryland 3401-R South East Belmont St., Portland 15, Oregon

DEALER & JOBBER INQUIRIES WANTED—WRITE SILVER SPRING, MD. ADDRESS

White Now

SHOOTERS CATALOG

. shotguns . . . handguns . . . ammunition . . . scopes and mounts . . . rifle, pistol, and shotshell reloading tools . . powders, bullets, etc. . . hunting clothing . . . camping equipment . . . gun cases . . . holsters.



LATEST COMPLETE FACTORY BALLISTIC TABLES

Kunkels' brand NEW 1956 catalog is jammed with the latest, the best, and the most popular items for all sportsmen and all dealers! We guarantee complete satisfaction with every purchase (or your money back)!

Please send 25e in coin or stamps to cover mailing and handling.

DEALERS

Write on your letterhead for FREE COPY and profitable dealer proposition.



SINCE 1870 --- SPORTING GOODS DISTRIBUTORS DAVENPORT, IOWA

GENUINE U.S. SIGNAL CORPS TELEPHONES AND COMMUNICATION WIRE!

EASY TO INSTALL TELEPHONE SYSTEMS. published the TARGET RANGE



TWO-WAY TELEPHONES!

Home - ranch - industrial. String wire, connect to phones, ring and talk up to 20 miles. Perfect performance—battle-field proven.

Kellogg Mag.—5 Bar Wall Phe handset, Each...\$22.50 per pair

BRAND NEW INSULATORS: Brand new, porcelain, 2 groove, screw type, 25/18" high x 11/2".
Dia., 3", SPECIAL—boxes\$3.95 KELLOGG TELEPHONES

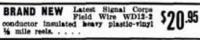
ALL WEATHER - ALL PURPOSE WIRE

NEW SURPLUS—JUST RELEASED On original factory steel reels. For communications, blasting, inter-com. Hundreds of other uses.

WIIOB 18 ga. 2-conductor insulated copper-steel conductors. Unused. new, 1 mile reels (5,280 ft.) \$17.50

\$10.00 16 mile reels (2,640 ft.)

Other wire and phones not listed. WRITE FOR FREE FOLDER.



THE IDEAL XMAS GIFT

GENERAL HANDGUN CARRYING CASE

PROVEN FINEST MADE

LORIS SALES P.O. Box 1896-G1, Sacramento, California Send check or m.o.-no c.o.d.'s-ail prices f.o.b. - Sacramento California Buyers add 30% Tax

BRITISH ENFIELD RIFLES



RIMINGTON PUMP ACTION
RIFLE-12 Shot Repeater
Cal. 44-40—Unusual opportunity to
get this rife at a low price. Limited
quantity Used—good condition.

44-40 CAL. CARTRIDGES, 100-59 Send Check or Money Order Peerless type, light weight brilliantly finished

PUBLIC SPORTS SHOPS 11 S. 16th St., Phila. 2, Pa.

Greatest Protection
 Utmost Convenience

CREAT

· Patented Rigid Gun Holders
Guaranteed
4-Gun Case \$26,25
5-Gun Case \$29,25

Sent Postpaid for Money Order or Check. \$1.00 extra west of Chicago.

Folder sent on request, Dealer Inquiries Invited

General Luggage Corp. 16 Harding St. Worcester 8, Mass.



HUNTERS. HAND-LOADERS

TOUGH, PLIABLE PLASTIC CARTRIDGE BOXES

Will not wear out. STOP!! — rattling, dirty and damp cartridges. Calibers 222 Remington thru 300 Magnum. Holds 20 cartridges, only \$1.50 each. Postpald. ENCLOSE REMITTANCE. NO C.O.D.'s.

Dealers' and Jobbers' inquiries invited.

BRAD'S GUN SHOP

204 CALADIUM ST., LAKE JACKSON, TEXAS

DEERSKIN TANNING

And CUSTOM MADE Into

Jackets — Gloves — Mittens

Write for Free Circular

UBER Tanning Co., Owatonna, Minnesota

able fact which many African hunters finally come to, and all professional white hunters acknowledge-the superiority of the double rifle for large game. "For heavy game like rhinoceros and buffalos, I found that for me personally the heavy Holland was unquestionably the proper weapon." Yet his handsome side-lock double hammerless of "royal" grade made by Holland and Holland of London was one gun which Roosevelt did not especially like, A heavy .450 nitro express rifle, bearing a gold presentation plaque with the coat of arms of the United States on it, was given to Roosevelt and evidently not built to his specifications. The rather abrupt drop to the butt together with Roosevelt's short-necked, stocky build, must have made it kick him unmercifully. Yet proof of Roosevelt's appreciation of the merits of a double rifle is given by pictures showing him and Kermit, each with doubles. Kermit evidently used a lighter, box lock double of somewhat less expensive quality.

When Roosevelt emerged from the jungles after ten months of hunting and collecting specimens, his reappearance was widely publicized. The power he had to stir men's imagination in his own times was astonishing. And, ever direct and to the point, he nearly capped his career with a final assassination. Before the ardently pro-nationalist students of the University of Cairo, he denounced the assassination of the pro-British premier Boutros Pasha. His life was threatened but nobody had the nerve to attempt to kill him. He was too good with a gun!

He had seen Africa, toured Europe: what next? Lost rivers attracted him to Brazil. There in an exploration of what map makers called "The River of Doubt," T.R. wandered over leagues of Brazilian jungles and collected numerous animals and other specimens for the National Museum. He used the Springfield sporter sometimes. His associate explorer, Brazilian Colonel Candido Rondon, carried a little Winchester autoloader of the Model 1905-7-10 type.

When the war came to America, Roosevelt rallied his rough riders to the call. He offered to raise a division of volunteers from among the "outdoor men" of the country who would be almost immediately ready for service. One time-consuming phase of army instruction could have been avoided with these men: they all knew how to handle a gun. Congress passed a bill authorizing the creation of two divisions of volunteers and 250,000 men signified their readiness to go to France under the colonel's leadership, but President Wilson vetoed the bill. "This is a very exclusive war," Roosevelt bitterly remarked, "and I have been blackballed by the committee on admissions."

T.R. spent the next months barnstorming for the Liberty Loan and Red Cross drives, and wrote scathing editorials in the papers urging an honest facing of the realities of war and whole-hearted participation in the effort by the side of the allies. Forced by political opponents to lay down his arms in battle, he never took them up again in peacetime. A fever contracted in the Brazilian jungles returned to him, and the passage of time had left its mark. He had no chance to go hunting again . . . in January of 1919 he died quietly in his sleep, far from hunting and the great frontier which had been so much a part of his life.

PISTOL CHAMPS

(Continued from page 26)

row habitue, and every time you pass the clubhouse on a golfing round the glasses are hoisted, and the fall football games call for a handy flask to ward off the grim chill, but just let a dram of the stuff Kentucky is famous for appear on the firing line and some prohibition-minded male Carrie Nation will point a finger.

Well, maybe these puritans have a point. Maybe a sixgun in the hands of an hombre who has just consumed anywhere up to a half-dozen highballs is a dangerous thing. Let's have a look at the record. During the 25 years that I have been shooting the pistol, I have never seen nor have I heard of anyone being shot accidentally at a pistol match. During the rapid fire stages the boys who are pretty well aglow sometimes let a shot go before the targets are fully exposed. These wild shots are inadvertently touched off after the gun has been brought to the "raised pistol" position and the bullet is tossed off into the air. I have never known nor have I ever heard of a gun being accidentally discharged anywhere behind the firing line during the past quarter century of handgunning.

This good handling of firearms by a bunch of fairly well spifficated pistolmen is accounted for by the fact that safe handling of the shooting iron is so deeply indoctrinated in the individual that he never does anything foolish, Regardless of how plastered he may become he has had his training in proper safety so strongly inculcated that he is never guilty of doing a single reckless thing.

An often disastrous but not unamusing angle to the entertaining practice of taking an occasional pull on the open end of a container of Johnny Walker, is that many a gunner does not know his own capacity. He begins in the morning with a few judicious nips-just enough to get up a proper head of steam-then steps up and bangs out a smoking 99. Ole! Boy, that new mixture of bullseye oil is the huckleberry!

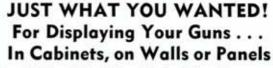
He describes a surreptitious route to his car, tilts up the trunk cover, looks around cautiously to see that he isn't observed, unearths the old flagon. Gurgle, gurgle. Um, that's good. Got to knock out a possible this next time. Gurgle, gurgle.

Comes then the timed fire, five shots in 20 seconds in two strings. This is easy. This is dead easy. Pak, pak, pak. Man, watch that bullseye disintegrate. Final score, a lovely possible-100.

A new national record is in the offing if he can keep up the pace. Hurriedly he scoots for the portable bar under the tailgate of the family bus. Despite the alcohol already aboard, he feels a lot of tension. He tells himself, "Steady, boy. Steady. We've got it in the bag. If we can just hold 'em and squeeze 'em this next ten shots rapid, we've got a new record." The firewater tastes like Coca Cola, trickles down like Smith Bros. cough syrup. "Hell, might as well take a good one, I'm gonna need it."

By the time his relay is called, he's as drunk as a hoot owl. And there isn't any new record that day. Some gunners never learn their capacity. I have seen others who could build up an edge, at the national

New! GUNBERTH* BRACKETS



These NEW specially designed Gunberth Brackets are made of rubber covered steel and are easy to use, screw-in type. Note how easily and securely the guns cradle in the brackets! Will fit all sizes and types of guns.



To better serve your needs these new Gunberth Brackets are available in two sizes: for handguns and for Rifles or Shot-

FOR HANDGUNS: 55¢ per pair ppd. 1 dozen pair......\$5.50 ppd.

FOR RIFLES or SHOTGUNS: 65¢ per pair ppd. 1 dozen pair......\$6.50 ppd.

PROTECT YOUR GUNS! ORDER YOURS TODAY!

FREE CATALOG HM3

... lists full line of Gun Cabinets, Plans, Kits and Accessories. It also contains a check list of all important questions on the facts you should know BEFORE YOU BUY or BUILD your cabinet. Don't Guess! Be Sure! Write for yours TODAY! No obligation whatever.

......

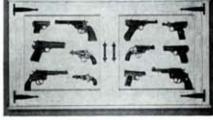
ILD IT YOURSELF!

PISTOL-BERTH® MODEL NO. HM-14DD-12-> Overall Dimensions: 50" w, 26" h, 4" d

Easy to follow working plans are now available to you. Plans for Pistol-Berth with twin doors are complete for the 12 gun size illustrated and also include details with complete bills of material for 20 and 28 gun sizes. The plans for the single door model are complete for 6, 10 and 14 gun sizes. The extra space in the larger sizes is gained by adding to the heights only, the widths and depths remain the same.

and depths remain the same.

Your long felt need for a well designed Pistol
Cabinet is answered with these NEW and very
versatile "PISTOL-BERTH" Cabinets. All size
guns are readily placed with handy screw-in type
brackets (illustrated above) and if you change
placements from time to time, the back is always
as good as new due to the patent perfo-board
insert, which is mounted on the %" thick back.



DETAILED WORKING PLANS FOR: PISTOL-BERTH with Twin Doors Complete for 12, 20 and 28 gun sizes \$2.95 ppd. PISTOL-BERTH with Single Door

Complete for 6, 10 and 14 gun sizes. .\$1.95 ppd. New! EXCLUSIVE "HANDBOOK"

Just published! This NEW "Handbook" is a comprehensive study of all types of Gun Cabinets. It selects the type best for you. Then tells you, shows you HOW TO BUILD and FINISH your own Gun Cabinet. Details on Kits, Plans and Hardware for 22 different models are all listed in NEW HANDBOOK. (Finished cabinets also available.) Yes, it even contains scaled patterns and drawings for you to work from. Don't buy or build your cabinet until you consult this authoritative Handbook. thoritative Handbook . . . giving you the com-plete details on what to buy or how to build for the very finest in Gun Cabinets. Send for yours NOW! Only \$1.00 ppd. "Copyright

Dealers' Inquiries Invited



COLADONATO BROS., Dept. G12F, Hazleton, Pa.

. BUILT RIFLES BARRELING
 STOCKING JENKINS GUN SHOP . Life Member NRA & NBRSA THE ORIGINAL PLASTIC STOCK INLAYS

C. D. CAHOON . DEPT. 2, TOPSFIELD, MASS.

ALL NEW *SPEC* C-55*SERIE*S

CHECKERING TOOLS WITH 23 CUTTING HEADS, 3 HANDLE STYLES. REAR VISION AND ADVANCED CUTTING DESIGN.



This is a new concept in cutter design and has ed to be the smoothest and fastest cutting ring tool. The unique spring-pin ning ends loose cutting heads and makes t simple. Insist on GUNLINE TOOLS.



ORDER TODAY! CAMP PERRY SET \$13.95 postpaid (6 tools, rule and instructions) EADER SET \$8.95 postpald tools, rule and Instructions) (4 tools, rule and instruction Bingle Tools \$1.75 to \$2.75 Write for new

Craft Industries BOX 108, ANAHEIM (3) CALIFORNIA

Dealers Only

Wholesale Only

"We do not compete with our Dealers"

SHIPS PREPAID

SHOTGUNS and RIFLES PISTOLS • SCOPES • RELOADING TOOLS FISHING TACKLE - OUTBOARD MOTORS

JUST A FEW OF MANY ITEMS ON HAND

(Subject to Prior Sale)

	rizi
New Rem. 740ADL 30/06	 \$139.95
New Rem. 740A 30/06	 . 124.95
New Rem. 722-244 cal	 . 89.95
New Rem. 722A-308 cal	
New Win. Mod. 70-243 cal	 . 120.95
New Sav. 99-308 cal	 . 105.65
New Mossberg 200K-12 ga	 40.00
New Colt Huntsman-22 cal	 42.50
New Hi Standard Sentinel	
Astra Cub—22—25	
Saka 222	. 135.00

NEW! SNIPER" .25 Auto, Pistol 2495

POCKET SIZE — LIGHTWEIGHT
EXCEPTIONALLY ACCURATE—
EASY TO DISASSEMBLE
Beautifully designed and finished by one of
Europe's leading manufacturers

Regular Dealer Discounts



DEALERS: We supply guns on affidavit for law enforcement agencies. Let us help you get this EXTRA business!



NOW AVAILABLE ALL NEW 1956 BUCCANEER OUTBOARD MOTORS WRITE FOR LITERATURE

> LARGEST STOCK OF STANDARD BRANDS

> Send For Availability List

WE PREPAY

CHARLES DALY, INC.

LYric 2-7586

Dept. G

Elmsford, New York

matches for instance, and keep it for ten days of steady match shooting.

Visit a big pistol tournament tomorrow. Look for the marksmen that are obviously three sheets under. You won't find a single one. Go on and look in on a round dozen of our largest and most important bangfests this season, continue to seek the borracheros who are tippling and shooting. You won't see a thing that resembles evidence. The pistol shooter may be the best two-fisted drinking man in organized sport but he's also got what it takes to carry it! And well he should with the practice he gets!

The Germans brought the Scheutzenfest with them to this country almost a century ago. Their game is played at 200 yards with offhand rifles. It was only partly a competition, equally an occasion for getting all good fellows together at which time the beer cask had its bung knocked in and everybody drank as he burned powder. As the day progressed, the drinking continued and the shooting was not stinted. Everyone had a whale of a good time and not a small part of the sport was the eating and the bibbling. Today, the same quantities of grain spirits are soaked up by our handgun shooters but the fine old spirit of the Scheutzenfest has been lost.

The National Rifle Association, parent order of all organized pistol men, is well aware that as a group pistol pointers are the biggest soaks on the range. These are regulations in the rule book which say that they will be tossed off the shooting grounds if crocked. Nothing is ever done. It is one of those circumstances of the sport which are best ignored. The NRA has consistently pursued a hands-off policy, choosing to let local club officials deal with the problem as they see fit. Undoubtedly what persuades the national order to this line of action-or lack of itis the fact that pistol shooting is the only competitive game today that indicates any real vitality. If NRA fathers followed the bluenose party line and attempted to dry up the portable bars so indubitably a part of the sport, it would knock the onehandgun game into a cocked hat,

CLADALOY BULLET CO.

Manufacturers of the popular new machine onat copper clad alloy bullets which can be driven at highest velocities. Available for hand guns and rifles. At your dealer or order direct. Write for free list and felder. Immediate delivery.

BOX 643

NORTH HOLLYWOOD, CALIF.



WHY BULLETS MISBEHAVE

(Continued from page 37)

oddity is caused by "bullet lag."

Deflection, due to wind, is computed by multiplying the difference between the actual time of flight in air and the time of flight in a vacuum by cross wind velocity. The respective times of flight for 100 yards in air for the .22 long rifle are approximately .287 second for the standard velocity, and .259 second for the high velocity. The respective times of flight for 100 yards in a vacuum, however, are .262 second for the standard velocity and ,225 second for the high velocity.

The difference in times of flight under the two conditions for the two cartridges are (.287 -.262) =.025 second for the standard velocity, and (.259-.225) = .034 second for the high velocity cartridge. It will be seen by multiplying these figures by cross wind velocity that a greater deflection will be obtained with the higher velocity cartridge.

This same condition occurs in a few other instances with other cartridges. It is just one of those strange ballistic problems that does not make sense, yet there it is with figures or on the rifle range.

Ballistically speaking, "yaw" isn't yes! Yaw is caused by the instability of a bullet when it first leaves the barrel. The degree of spin given the bullet by the twist of the rifling has a direct influence on its stability, consequently on the amount of yaw. One could say that yaw is the measure of the extent to which a bullet is not traveling exactly nose on.

My Boss bought a Opin GUN-TECTOR

And rightly so says good old Hector, Now we go hunting to his favorite lair, Knowing his gun has had proper care.

And I'll tell you another thing old Spot No matter what kind of gun your boss has got, There's a KOLPIN GUN-TECTOR made just right,

To fit his gun, keep it clean and bright.



The "STRAIGHT-A-WAY" \$4.95 NO. 62 Alligator Vinyl leather. Quilted gun cloth with thick felt inner padding with handle-sling and 16thick felt inch zipper.



The "ALGONQUIN" \$4.99

NO. 15 Deep brown Shu-Kid Vinyl leather. Two-tone Diamond gun cloth with thick water repellent cushion-ing with wraparound handle and full length zipper.

AN UNLOCKED GUN CASE AND A CURIOUS SMALL CIDENT THAT COULD HAVE BEEN AVOIDED.KOLPIN ZIPPER TYPE GUN-TECTORS FEATURE A LOCKING RING AS SHOWN.

Kolpin GUN-TECTORS combine beautiful craftsmanship, fine ap-pearance and faithful service at a price that brings complete protection for fire arms, within the reach of every gun owner. All have famous VPI rust inhibitor.

All have reinforced tips with hanging loop. All rifle sizes fit Lo-m

Lengths: 40", 44", 46", 48", 50", 52".

GRIPS

SEE THESE AND MANY OTHER STYLES AT YOUR FAVORITE SPORTING GOODS DEALER OR WRITE TO

KOLPIN BROS. CO. INC., DEPT. G, BERLIN, WISCONSIN

WORLD CHAMPION GUNS

for Hunters & Trap Shooting

MERKEL BROS. OVER-UNDER

12-16-20 bore, at VERY LOW prices. Catalogue free. W. GLASER, Gunsmith

Loewenstrasse 42, ZURICH 1, SWITZERLAND

MODERNIZE YOUR GUN WITH Franzite

IMPROVE YOUR SCORE

other Wide choice

SPORTS, INC. (Mfrs.) 5501 Broadway, Dept.

HOLLYWOOD RELOADING

HOLLYWOOD "MICROME-TER" SHOT MEASURE, Re-quired for fast accurate shotshell reloading — \$24.50

HOLLYWOOD "SENIOR"
RELOADING TOOL. Reloads
rifle, pistol, shotshells
and swages bullets,
stripped — \$49.00



HOLLYWOOD RELOADING DIES, Made for all caliber of rifle, pistol and revolver shells. A set - \$12.50

HOLLYWOOD PISTOL AND REVOLVER SWAGING DIES. For 38 spec., 44 spec., and 45. Other calibers later. Per set —

HOLLYWOOD "MI-CROMETER" POW-DER MEASURE. Ac-\$24.50

HOLLYWOOD "SEN-IOR" RELOADING TOOL SET-UP. Com-plete for shotshell reloading, with pow-der and shot meas-

HOLLYWOOD "TUR-RET" RELOADING TOOL. Complete with Hollywood shotshell dies, pow-der and shot meas-\$213.50 HOLLYWOOD "SEN-IOR" RELOADING TOOL. Shown set-up for swaging bullets. \$168,00



HOLLYWOOD SHOTSHELL DIES FOR "TURRET" FOR "TURRET" TOOL. Complete with speed dies. All gauges 410 to 10 gauge. Per set- \$76.50



HOLLYWOOD "TURRET" RELOADING TOOLS. Shown at left side set-up for shotshell reloading. Be-low set-up for rifle or pistol reloading. A fast versatile production tool.

HOLLYWOOD "TURRET" \$88.00



HOLLYWOOD METAL BULLET SWAGING DIES. From 22 to 375 caliber. Per set — \$39.50

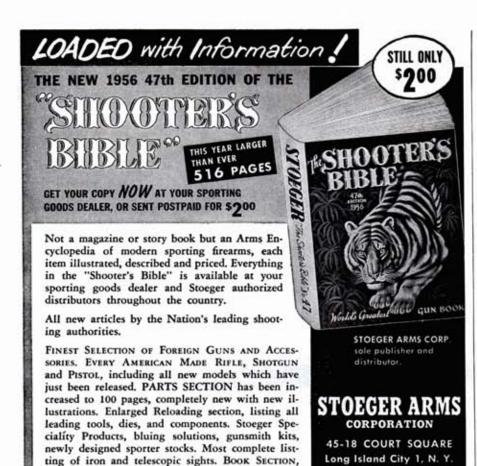
HOLLYWOOD CHRONOGRAPH. precision instrument. Complete less battery. Net — \$97.50



RIFLE, PISTOL AND SHOTSHELL COMPONENTS CARRIED IN STOCK FREE LITERATURE—DISCOUNTS TO DEALERS—ABOVE PRICES F.O.B. HOLLYWOOD

HOLLYWOOD GUN SHOP

6116 HOLLYWOOD BLVD. HOLLYWOOD 28, CALIF.





completely revised. Plus many other sections featur-

ing hundreds of items too numerous to mention.



SALES & SHOWROOMS

507-5th Ave. (at 42nd St.) N. Y

HANDLOADERS! YOU NEED the

new "AUTO-MATIC"

FITZ Flipper

SAVES YOUR TIME AND TEMPER

flips ALL PRIMERS base UP or DOWN as YOU choose INSTANTLY!

SIMPLE - FAST - AUTOMATIC

Guaranteed to work every time Made of UNBREAKABLE FITZ DURAMITE At your Dealer or direct from manufacturer



ACT NOW!—SEND \$1.50

for rush ppd. shipment. Sorry, no C.O.D.

BOX 14002, LOS ANGELES 49, CALIFORNIA

DEALERS! JOBBERS!

Start the **NEW Year with a NEW Product for NEW Sales on a NEW SET-UP!** FREE DISPLAY! WRITE TODAY!

When you spin a top you will notice that when it first begins to spin it wobbles badly. This is yaw. The longer it spins (until real low speed is reached), the straighter and more stable or smoothly it spins. This, then, is the action of a bullet, and when it first leaves the barrel it begins to wobble. Then after a time it begins to settle down and 'go to sleep" like the top.

Sometimes the yaw is so great that it can be noted by the bullet hole in the target at the shorter ranges. The hole will show slightly oval instead of perfectly round, indicating that the bullet was not traveling

exactly point on.

Yaw can be so great that a bullet will actually pursue a spiral path through the air. Ballistician Charles S. Cummings II purposely introduced an excessive amount of yaw into a bullet, and its spiral path down the range grew to about six feet in diameter (how could you duck that one!).

Yaw diminishes as the bullet goes down the range or, in other words, the further it gets from the gun, and finally more or less goes to sleep. But away out where the curvature of the trajectory becomes abruptly downward, gyroscopic action from the spin of the bullet tends to cause the bullet to again "point where it ain't going."

It is sometimes difficult to believe just how fast a bullet revolves when fired from a high speed rifle. Take our standard military cartridge, the .30-'06, for example. The bullet at the time it leaves the muzzle makes one revolution for every ten inches of forward movement.

The cartridge has a muzzle velocity of 2800 feet per second. With its ten-inch twist, that means the bullet is spinning at the incredible speed of 3,360 times per second, or

201,600 times per minute.

The high revolving speed gives the bullet a gyroscopic action. When the bullet's trajectory curves downward its axis attempts to hold its original direction, thus setting up a different kind of resistance, and when combined with yaw, slight though it is at the longer ranges, tends to make a bullet curve off a straight course, to the right or left, depending upon twist of rifling. If that sounds complicated, it certainly is.

A bullet fired from a rifle with a righthand twist tends to turn to the right, while one with a left-hand twist will turn to the left. The old Springfield service sight even provided allowances for drift. Actually, this drift is slight and can be disregarded at ordinary ranges.

This is the life of a bullet. Enough to give people headaches, and right now I have one!

SUREFIRE RESCUE

Two deer hunters after shooting their limit found themselves lost in the mountains. Finally, one said: "I know how we can get back to our car. We'll shoot another deer."

"How would that help?" the other asked puzzledly.

"Why, you know darned well," said the first hunter, "that if we shot another one, it would be illegal and a game warden would show up in five minutes."

—Harold Helfer

CARTRIDGES

(Continued from page 44)

that instead of these being strictly a military contract cartridge, they were first offered to the civilian shooters in April of 1914. In addition, he says, these were made long after the war, the last production lot being produced in 1939. He also reports that this type bullet was also made in the .22 Winchester Automatic Rifle caliber.

English Ammunition

I get much enjoyment, and a lot of interesting information out of old military books, especially those that deal with ammunition. While reading through the English manual entitled "Treatise on Ammunition 1881," I came up with some odd bits of data.

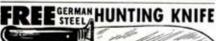
The .45 Martini-Henry with its coiled brass case was then their latest rifle cartridge, and the book has a colored plate showing its construction. I had never before realized how complex the makeup of this cartridge actually was. There are 13 separate pieces of brass, wrought iron, copper, lead and tin, beeswax, and paper used in its construction, not counting the explosive compound. Despite all these complications, this type of case was used for many years.

The British were still issuing to their Coast Guard skin cartridges for the Percussion Colt revolvers. These cartridges with 13 grains of pistol powder, and a 135 grain bullet were each enclosed in a paper envelope. The envelopes had a strip of black cloth tape, so that it might be quickly torn off before loading. The cartridges were packed in bundles of 18, and enclosed in waterproof bags to protect against moisture. Apparently this was one of the last stands for the military cap and hall Colts

In 1881 England was just in the process of discontinuing the .65 caliber Gatling gun. Its cartridge, which they say resembled the Martini Henry rifle cartridge except for size, had a coiled brass case, a 1,422 grain bullet, and used 270 grains of powder to help it along.

For use in India, they had also issued a special 0.45 (or .450) Gatling gun cartridge. This cartridge contained 5 grains less powder, a 70 grain lighter bullet, and was 0.15" shorter than the usual Gatling load. If you have a .450 Gatling cartridge that is a bit shorter than usual, check it over carefully; you may have one of the India Specials.





4-INCH BLADE We give you handlest hunting and fishing knife you've ever had! Has 4-INCH LONG highly tempered steel blade—VERY SHARP! Attractive handle. We send knife FREE to acquaint you with our below-wholesale bargains. Please send 25c for handling. NO LIMIT—but send 25c handling for each knife. handling, NO LIMIT—but send 25c handling for each knile. Order TODAY! HUNTING KNIFE, Dept. K-II, Box 881, St. Louis, Mo.



FAMOUS WALTHER AUTOMATICS

World's Safest! World's Finest! 5 Safety Features!

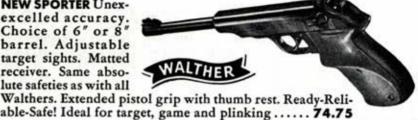
NEW WALTHER P. P. NEW PRE-WAR quality. Superbly balanced. Precision manufactured. ABSO-LUTE SAFETY. No accidental firing. Ready as a revolver with DOU-BLE ACTION. OUTSIDE SAFETY

and INSIDE AUTOMATIC SAFETY. SIGNAL PIN. EX-POSED HAMMER. Extension finger magazine for increased accuracy. Home protection, sidearms for law enforcement, camping, hunting. SAFE! Add \$10 for nickel plate models
P.P. .32 or .380 cal. blue \$57.50 P.P. .22 LR blue \$52.50

NEW P.P.K. Smaller version of the P.P. with same safety features. Compact and lightweight. Excellent for law enforcement and necessity for concealed protection. Immediate takedown. Stationary barrel for highest accuracy.

P.P.K. .32 or .380 blue..... P.P.K. .32 Featherweight-blue Dural Frame (17 oz.)....\$70 .22LR Featherweight-blue Dural Frame (16 oz.) . \$74

NEW SPORTER Unexexcelled accuracy. Choice of 6" or 8' barrel. Adjustable target sights. Matted receiver. Same absolute safeties as with all



Famous WALTHER "OLYMPIC" Air Pistol

Modeled after the Walther Olympic Match Pistol which won the Olympics

at Helsinki in 1952. Made in Western Germany. Adjustable Military Trigger. Automatic Safety. Micrometer Sight-Windage and Elevation. Three sets of Front and Rear Sights. Weight 2 lbs. 5 oz.

— Length 12 inches — .177 Cal. — Shoots American waisted or solid pellets. Also darts.



Importers

SEE YOUR DEALER OR WRITE FOR FREE CATALOG #G1

682 Mission Street THALSON COMPANY SAN FRANCISCO, CALIF.

LACHMILLER SHOTSHELL RELOADER \$60.00

COMPLETE FOR ONE GAUGE

THALSON ECONOMY SHOTSHELL RELOADER—Complete for 1 Gauge......\$22.50

Complete Stock or Components

Dealers Invited

1409 WALNUT STREET

ARMS

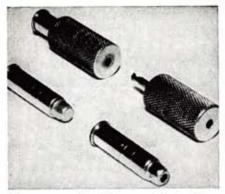
Our Prices Are Right

C. R. SPECIALTY COMPANY

THE HANDLOADERS PARADISE

AMMUNITION

ACCESSORIES KANSAS CITY, MISSOURI



Goerg Hollow Pointer

for .38 Special & .357 Magnum

Doubles Killing power of bullet \$3.75 postpaid - Dealers inquire

GOERG ENTERPRISES

ALFRED J. GOERG, Manager 609 South Vine St. Port Angeles, Wash

THE OLD DOPE BAG STOCKS NESS SELECTED SUPPLIES PALMA COMPOUND



Penetrant, Lubricant, Inhibitor
Exclusive Top Efficiencey all 5 ways.
Try 't. See for yourself. 2 oz. 50c.
Per quart can in mailing carron \$4.0c.
Bases, Bands, Butts, Blanks, Cases, Covers, Capy.
Carvers, Cutters, Chokes, Discs, Dies, Dots, EyePieces, Finishes, Funnels, Furnaces, Gauges, Grips,
Inlays, Jackets, Jigs, Loaders, Lead Measures,
Mounts, Mats, Mitts, Notions, Oil, Pads, Pilots,
Ramps, Rods, Resizers, Reloaders, Siehts, Scopes,
Spotters, Stands, Stoppers, Swivels, Slings, Safeties, Scales, Screws, Stocks, Shoes, Triggers, Trim.
Trimmers, Tags, Tools, Trunks, Wipers.
Write or send postcard for Free Catalog of prices
(Send letterhead for discount sheet)

FRED NFS S RED WING, MINN.

FRED NESS RED WING, MINN.



30/40 CAL. KRAGS OUR SPECIALTY 45/70 Cal. Springfield Rifles Model 1873 \$35.00; Antique & Modern Guns; Civil War Army Hel-mets \$3.50; Insignia & Buckles, etc. W. STOKES KIRK

3429 Germantown Avenue, Philadelphia 40, Pa.



authentic "Frontier" appearance . . . load easier, faster! This new Colt-style gate is forged from finest steel, precision made to exact "Single-Six" tolerances. Handsomely blued-matches your gun perfectly. Install it yourself in minutes, no special tools req. Money Back if not delighted! Only \$3.95 ppd.

Send cash, check, or Money Order no C.O.D.'s please, DEALER INQUIREE.

DEALER INQUIRIES INVITED

PREMIER WEAPONS CO., Dept. G1 7542 Bloomington St. Burbank, California



QUAIL NEVER QUAIL

(Continued from page 23)

plays in outdoing him in the field.

Neither of us were novices; we were pretty familiar with the quirks of quail. We let my own pointer and Ray's older pointer and setter out of the car and headed for the drying little creek that watered a piney flat between rolling cropland in the south end of the county. It was 4 p.m. and it was storybook weather. Almost like a preplanned lesson in graduate troubleshooting, the hunt launched with a stifflegged pointing of the dogs more than halfway to the woods, about where a covey belonged under the circumstances.

If there's a prettier sight than a trio of pointing dogs anchored among golden, hogbattered cornstalks that gleam under a yellow winter sun, I do not know what it is. The musky-sweet smell of the cornfield hung pleasantly about us as we moved in . eyes of the dogs moist, bright as jewels in the sun, Ray on my right (he's a southpaw). The ground litter was patchy, exposing grain scattered by the wastrel hogs.

A stalk crunched beneath my low boot and from under the setter's nose a lone hen zoomed almost soundlessly right between us, straight as a projectile. She was on my side but I let her go. Ray glanced a question my way but I couldn't have told him in words. at the instant, why I didn't shoot . . . yet

he instinctively knew.

I took another step, and another, but nothing happened and then the dogs were snuffling loudly in the dead Mexican clover underlay, their tails wagging briskly. I knew why I hadn't shot the single: partly because I clearly recognized it as a hen, but mostly because conditioned experience had worked faster than my conscious brain or arm. I shielded my eyes against the sun and looked in the direction the lone bird had gone. As if to confirm my appraisal a thin shadow flickered swiftly across the corn and Ray whirled, fired and brought down the hawk with a load of 8's from his 20-bore gun. Together we headed for the rough drainway where the single had alighted and without need to speak we killed seven birds out of the covey our birds pointed there. Magic? Luck? Not at all.

Ray and I had early learned the answer to that one. When for no apparent reason a mere fragment of a wide-feeding covey materializes from a feed patch it is because something already has flushed the main bevy. In the woods it might be a fox or cat. In open fields it is always either man or hawk. Each section of the country has its own marauders and in south Georgia it is the blue darter or the chickenhawk. Because the bird arose so quietly and straight we knew it had advance warning to prepare its getaway well in advance.

RELOADERS

New England Headquarters for Equipment—Components

UNDERWOOD'S

Post Road

Shrewsbury, Mass.

ANTIQUE GUN PRICES

NEW 'LLUSTRATED BOOK gives up-to-data prices of over 2,000 American pistols, revolvers. Describes every make, model from flintlock through automatic. Plus information how to collect old guns, make money, etc. Valuable for Buying, Seiling. Collecting.

ONLY \$1—POSTPAID. ORDER NOW. Dest. G.

Free catalogue of gun books.

PIONEER PRESS, Harriman, Tennessee

AMMUNITION SPECIAL

38 SPEC. Round Nose. Wad-Cutter and Semi-Wad-Cutter, \$32.50 per 1,000 45 AUTO. Round Nose, Semi-Wad-Cutter \$45.00 per 1,000. No Order Less Than 1,000.

List of Custom Ammo and Loading Equipment on Request.

SHELL SHOP, Dept. G 3705 Sunset Blvd., Los Angeles 26, Calif.

PECAR / BERLIN Vari-Powered Scopes



Two new great scopes to give the American shooters the finest in German optics and workman-

The only vari-powered scopes in which it is possible for the shooter to have the correct size reticle

for the power desired. Nils O. Hultgren, Los Angeles, custom stockmaker: "The Pecar is a fine scope, my customers are real gun nuts and in my sample scopes I have a Pecar Scope. Their choice is usually the Pecar.

Pecar/Berlin binoculars will soon be ready for delivery.

Ask your dealer to show you the Pecar Scope. Free Literature.



2¾ x 64....52.00 x 81.....58.00 x 59.....60.00 x 43....85.00

Pecar Vari-Powered Scopes

3x to 7x... 95.00 4x to 10x...100.00

AuthorizedJobber Inquiries Invited

Krieghof Drillings: In 12 or 16 gauge with any cali-ber rife, engravings and monograms. Bend 15 cents for literature and prices Krieghof Agency's open.

Charles W. Leavell Sumter, South Caroline

The bird knew exactly what cover the covey would choose to escape such a predator, and by watching its flight we had saved ourselves many minutes of blind hunting—because bobwhite is a stinker for giving away secrets. The remainder of our action had simply followed the pattern.

Even had no bird arisen from such a strong point the dogs' excited making of game would have justified our picking out the nearest cover that afforded protection from hawks and setting the dogs to work it. You'd be surprised how consistently such common sense pays off.

We dropped down from that field and worked toward a weedgrown tobacco bed in the edge of some pines, just beyond plowed ground, where I had three times running found a covey this season. I had learned their flight path and pinpointed the patch of saplings near the creek where they would light. A cold deck.

Right on schedule the dogs hit the covey, the lead dogs out of sight and my pointer backing staunchly from the field.

Ray tossed a clog of earth into the brush. The hedge shook fiercely with the roar of beating wings as the covey went out. We dropped two birds and I got both of them. They were wising up to this shooting business and only a widely separated trio had risen high enough to be seen. The others had whirred off through the weed tops. "That's all right," I said. "I know where they'll hit. You'll get your shot."

My dog already knew-but this time we were really wrong.

He was casting about in the saplings when Ray's pointer doubled in excited delight, mouth quivering, mellow eyes rolling carefully from Ray to a spot on the ground and back. I said, "There's your shot. Take him. I'll cover for you."

Him was right. Ray dropped a heavy cock bird without difficulty. But there the thing ended. No more birds. The dogs hunted valiantly as five o'clock, five-thirty came, but they didn't even make game on another single.

Perplexed and stubborn, I sat and lit a cigarette. Ray, instead, climbed a high, wild-fire blackened stump. Shadows here in the woods had grown so long that only his curly black hair and face were in sunlight. He looked nearly around the clock, until his eyes settled on a bare field across the creek. "What grows over there?"

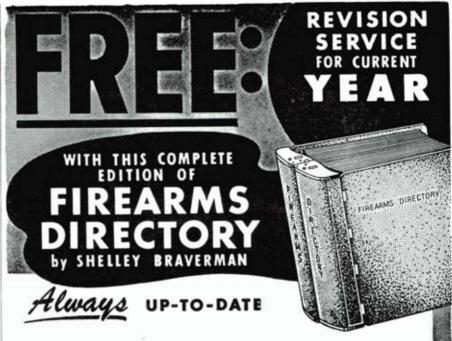
"Not anything now," I replied wearily.
"It was watermelons and then burned off,
except a patch of wormy turnips on the low
side."

"That's what I thought," he said with a rising inflection. "Let's go!"

There was no foot log and I wasn't enthusiastic about wading the creek on nothing drier than theory. Then I got up and splashed in, because I was remembering too.

The two-acre turnip patch, exploited save for a ragged, flattened clump here and there, was utterly bare. We readied our guns, knowing the dogs couldn't hold them here in the open.

Sure enough, those turnips began to sprout quail even before we got in gunshot but we bagged four before it was all over. I've seen wised-up birds employ the same trickery in many sorts of apparently-toosmall clumps that remain in bare fields, probably because they can see the hunters



This is the only-of-its-kind Gun Encyclopedia which, since 1951, has been serving those whose vocation or avocation includes Firearms... Collectors, Dealers, Gunsmiths, Libraries, Manufacturers, etc., throughout the world, are finding the Firearms Directory more and more valuable.

Police Laboratories from Scotland to Singapore use the Firearms Directory!

Since its inception, The Firearms Directory has grown each year by means of additions and revisions, to the extent that it now weighs more than six (6) pounds!

PROFUSELY ILLUSTRATED - THOUSANDS OF ILLUSTRATIONS!

The unique maintenance service, consisting of additional new material and revisions, solves the "obsolete book" problem—The FIREARMS DIRECTORY IS ALWAYS UP TO DATE, AND THE MAINTENANCE SERVICE KEEPS IT THAT WAY; there is nothing else like it in the Firearms field.

THE FIREARMS DIRECTORY IS DIVIDED INTO SIXTEEN SEPARATE SECTIONS:

SOOKS and PUBLICATIONS
CLUBS and EANORS
CODES and PROOF MARKS
DEALERS
FIREARMS, MISCRELAMBOOK

GLOSSARY
GUNSMITHS
LIGHTIPICATION
LABORATORING
LEGAL
MANUFACTURERS and IMPORTERS

PATENTS PIETOLE SIFLES SHOTOUNS TECHNICAL MOTE

Appropriate material, contained in the above classifications, is continually added tofor example, the "PISTOL ATLAS" (pp. 34-35, FIREARMS IDENTIFICATION, J. S. Matcher)
long unavailable, will be at YOUR hand as a Firearms Directory owner . . . Also, each
patent in the Firearms field is extracted with illustrations and and included in the annual
supplement . . . And, of course, our world famous Isometric Drawings—of which we now
have sixty-seven—all to be included in the Firearms Directory! These range from the
Collier Flintlock Revolver and Patterson Colt through the modern automatics—Truly a
wealth of material nowhere else available.

EACH F/D COMES TO YOU IN A SPECIALLY DESIGNED, CUSTOM BUILT, TENGWALL BINDER!

Examine it Free at your local Library, or order your own copy now...

PRICE—Including Revision Service for Current Year-

UNITED STATES: \$20.00

FOREIGN: \$22.00

THE FIREARMS DIRECTORY 207 EAST 31st STREET • NEW YORK 16, N. Y.







4 TREMINGTON \$350 Per Box (50 Rds.)

.30 M.I. Carbine Per 100	\$ 7.00
.30-'06 Military Late Issue Per 100	7.50
.45-70 Smokeless Low Pressure Per 100	10.00
32 Remington Rifle Cartridges	10.00
Per 100 351 Winchester Self-Loading Per 100	8.00
.35 Winchester Self-Loading Per 100	8.00
30 Remington Silvertip Per 100	10.00
25 Remington So't Point Per 100	10.00
32 Long R F Cartridges Per 100	4.00
-32 Short R F Per 100	3.50€
.25 Rim-Fire Shorts Per 100	3.50
B101 C11	

Rifle Slings, web, New Gov. Surplus 154 inch 69 c

RECOIL BOOTS for shotgun \$3 DOZEN



 ${\mathcal D}$ UBLIC SPORT SHOPS 11 5. 16th St., Phile. 2, Pe. Ne CODs

POINTER STOCKS

The original thumb rest stocks \$6.50 and \$7.00 pair.



\$2.95 pr GREAT WESTERN Single Action Guns-most Send for FREE CATALOG. Address Box 360-G.

SOUTHWEST CUTLERY & MFG. CO.

Montebello, California



SHOT MEASURE

Sturdy Aluminum and Steel Construction. An insert sleeve for each shot size. Uses a pint bottle for shot or powder hopper. (Powder sleeves also avariable.) Be sure to state shot size & load weight \$9.93. Extra Sleeves 50c (Shot or Pow.er) \$1.00 to \$1.00 t

HOLLOW GROUND SCREWDRIVERS



For Gunsmiths-To Fit Gun Screws FOR GURSHITHS—10 FIT OUR SCIEW set of 7 Spring Steel Screwdrivers, accurately ow (or straight) ground, to fit sight screws, is to to twist or chip. Wood handles \$5.50 Post special DeLux Set with Pyrolyn Handles and Ch its (Freentation Set) \$12.50.

REGULAR SCREWDRIVERS

REGULAR Scrawdrivers (NOT HOLLOW GROUND) sides ½ x 2 to 5/16 x 10°. Guaranteed not to ist or chip. . R.9 Wood Handles . . S S.O F.P. . P.R.9 Pyrolyn unbreakable Handles . S1.00 F.P. **GUNSMITH PUNCH SET**

punches, one starter punch and one center Mounted in a hardwood block holder. 7 a with Holder 83.50 Post Paid. for our Catalog on Gunsmith Hand Tools. Grace Metal Products, Elk Rapids, Mich.

well and feel it is time to take stock.

The sun was gone as we angled through the creek toward home, our guns slackly shouldered and the dogs at heel, when we stumbled right into a tremendous, tightly grouped covey readying for roost.

The roar, in that quiet dusk, was ter-

Most of the birds flew a short way to our left and pitched into a vast brier thicket, the minority twisting off down the creek beyond visibility.

"Well, I'll be-!" Ray said, his gun still shouldered. "Reckon we can find any of 'em? I wouldn't crowd 'em but this may be my last chance until long after Christ-

FOREIGN PARTS SPECIALIST

Mauser (pistol & rifle), P38, Luger, G43, Japanese (pistol & rifle), Italian, Browning, Ortgles, some Springfield, Enfield, 45 Auto., Others. Stamped, addressed envelope for list. Mauser HSc Firing Pins, Springs, 4,00 set. Ortgles Firing Pins 2.50 ea. Japanese 7.7 Guard Screws 25e each, \$2.50 Dozen. Mauser Military Bolt (receil) Springs. G43 Receil Springs, Luger Ooli Mainsprings, Japanese Mainsprings (rifle) 75c ea., \$5.08 dezen, \$5.50 dezen assorted.

BOB LOVELL, BOX 401, ELMHURST, ILL.





COMBAT GRIPS

Made of imported rosewood

for all popular S&W and Colt revolvers \$12.60 Postpaid Satisfaction Guaranteed SEND FOR FREE LITERATURE Custom Craft Co.

Box 457-M, Pasadena, Calif. DEALERS INVITED

I looked carefully at the way the creek bent, at the receding glow in the sky, and slowly smiled! "Yes, I think we can do even better."

Ray glanced at me narrowly, but I motioned him to a flat low stump, sat on another myself and pulled the reluctant dogs down beside us. The dying day had sucked most of the color out of the woods, so that greens and browns looked little different. A chill had lowered quickly and there was a promise of frost in the air.

I knew the quail would be impatient, would try to regroup quickly, particularly since they hadn't been shot at. I counted off a full minute and then whistled a single, fullcheeked call.

There was no answer, but out of the pale gold dusk we saw them coming, fast, weaving, almost soundless, below treetop height. When we quit shooting, five more quail lay fluttering about us. One didn't flutter: he had been so close he had been saturated.

Some ten birds of that surprised returning segment had escaped. In the confusion of semi-darkness filled with blazing orange muzzle blast, they wheeled sharply, dipped and landed right between us!

Did they then take off again in bedlam, or cower in terror at how easily we could murder them-even step on them?

With heads high, plump bodies stretched incredibly long and little feet blurred by speed they marched proudly and bravely right by the trembling, gawking dogs to the safety of the nearest thicket.

A quail quail? Better he should be named Butch.

NEW Canada Sportsman's Catalogue

SPORTING GOODS OF QUALITY
Hunting, fishing, camping equipment. Over 160 pp.
1000's of Illustrations. Goods from Canada, England.
France, Spain, Italy, Germany, Japan, U.S.A.—the WORLD's
HEST now available to you by mail. Price as WORLD's
funded with first over to you for the price of the pr

FAJEN'S

Quality Gunstocks Experience the thrill of having your

favorite rifle or shotgun stocked with one of our CUSTOM FINISHED or SEMI-FINISHED stocks. We are offering the finest most complete line in the industry.

Send 10¢ today for our big new 36 page catalog No. 55. Full of pictures illustrating new stock designs. Shows our new checkering and carving designs for custom stocks, also the latest in semi-finished rifle and shotgun stocks.

Box 1150, Warsaw, Missouri REINHART FAJEN,

CLOSING OUT SALE — BRAND NEW MERCHANDISE Postage extra Give second choice if possible — Address:

THE GUN MARKET

Classified ads 10c per word per insertion including name and address. Payable in advance. Minimum ad 10 words. Closing date for the March, 1956 issue

(on sale February 1) is December 16. Print your ad carefully and mail it to: GUNS Magazine, 8150 North Central Park Blvd., Skokie, Illinois.

COLLECTORS

NEW SERVICE! Monthly list \$1,00 year, Hundreds of good buys! Antique firearms, swords, flasks, military items. Norm Flayderman. Wallingford Hall, Kennebunk, Maine.

BIGGEST SELECTION of Antique and Modern guns in Midwest. We buy, sell or trade. Open Sundays 9-5 p.m. Weekdays 12-9 p.m. Frontier Trading Post, 482 Northwest Highway, Des Plaines, Ill. On Route 14.

100,000 GUNS, ACCESSORIES, Ammunition—Winchesters, Colts, Mausers, Lugers—Bargain Catalog 8.50, Agramonte, 201 Warburton, Yonkers 2R, N. Y.

RARE AMMUNITION. Send 10¢ for single specimen list. Jackson Arms, 2926 No. Henderson, Dallas, Texas.

BOOKS ON antique guns, the Confederacy, and Western lore. Free list, Jackson Arms, 2926 No. Henderson, Dallas, Texas.

LARGE, VARIED stock of antique guns. Write us your needs. Illustrated catalogs issued during past three years available—7, 9, 10, 11 & 50¢ each: Catalog 8 & \$1.00. Jackson Arms, 2926 No. Henderson, Dallas 6, Texas.

MANY MODERN, Antique Guns. List 10¢, Modern, Obsolete Cartridge list 10¢, Ed Howe, Coopers Mills 10, Maine.

COLTS! HUNDREDS of Colts, antique rifles, and rare weapons listed in new catalog and '56 supplement, Send \$1 (refundable with \$5,00 purchase). Pony Express Sport Shop. 17460 Ventura Blvd., Encino 4, Calif.

CARTRIDGES FOR collectors, gun books. New Handbook-Catalog #18 mailed for 25c coin, McDaneld & Wheeler, Osborne, Kansas.

COLLECTORS & SHOOTERS — Attention: New list now being mailed covering Gun Accessories, Military Equipment, Leather Goods, Helmets, Armor, War Relics, Powder Horns and Flasks, Medals and Insignia, Shells and Grenades, Uniforms—profusely illustrated, 25¢ ppd. Martin B. Retting, Culver City 23, Calif.

GUN COLLECTOR Henry J. Dwillard fine shotguns for particular shooters imported and American buy - sell - trade. 1516 Sunnyside Drive, Kalamazoo 17, Michigan.

DAVY CROCKETT Curly Maple Stock blanks sawed to patterns 5 ft. long post paid \$12. Same in Walnut \$8. L. G. Stockberger, Garrettsville, Ohio.

FINE GERMAN Jaeger Rifle, Flintlock by Erttel \$150,00, Send stamp for List, John A. Dron, Jr., Ojal, Calif.

OLD COLTS—all kinds. Also Winchester Model 66 (brass) and 1873 models. We make new stocks for same, completely shaped and sanded, ready for you to put on your finish. \$6.50 per set. Postpaid. Send 25¢ for list. Laredo Gun Shop, 3110 San Bernardo, Laredo, Texas.

COLT SINGLE Actions, \$25,00 to \$1,000,00, All parts including frames. Whichester 66 & 73 carbines, Colt C & B and parts reasonable. Any part made for any gun, rebining, electroplating and general gunsmithing. Send for big free list, Greer Firearms Company, 1002 West Poplar Street, Griffin, Georgia.

GUNS & AMMUNITION

LEGAL GARANDS, \$110.00. Carbines, \$75.00. '03 Springfield Sporters, \$87.50. Sloper, Box 165, Trinidad, Colorado.

GERMAN MOD. 98 8 mm, Mauser rifles; Very good, \$37.50; Excellent, \$42.50. Jap 30-06 cal. converted rifles; Very good, \$25.50; Excellent, \$29.50. U. 8, 30-06 cal. Springfeld rifles; Good, \$42.50; Very good, \$55.00; Excellent, \$65.00. Money back guarantee; Free 1956 Gun List, Freedland Arms, 34 Park Row, New York, N. Y.

100,000 GUNS, ACCESSORIES, Ammunition—Winchesters. Colts, Mausers, Lugers—Rargain Catalog \$.50, Agramonte, 201 Warburton, Yonkers 2R, N. Y.

AMMUNITION: 30-06 SPRINGFIELD — factory loaded only \$5.50 per 100 rounds, \$42.50 per 1,000 in case lots of 1500. Shipped Duty Free, International, 1011 Bleury, Montreal, One.

FAMOUS .45 SMITH & Wesson and Colt Revolvers with holster \$22.50, 30-06 Enfield Rifles (Mfg. by Winchester Remington, Eddystone) 6-shot repeater \$29.50, Also available in .303 British Caliber \$24.50, 30-06 Springfield Ammunition \$5.50 per 100, Shipped Puty Free. Send remittance for immediate shipment, Dealers Discounts, International Firearms Co., 1011 Bleury, Montreal, Que.

WORLD'S FINEST Guns. Unequalled grades, Rare Swiss Lugers, German Commercial Lugers, commercial Mausers, Walthers, etc. * • Free Pistols * • Rare Swiss Army carbines, Schmidt-Rubin rifles, finest condition obtainable, yet lowest prices • • • Luger and Mauser .22 adapters, field kits, magazines, parts, • • • Museum-grade percussions, flintlocks, pistols, muskets, rifles, shotguns * • • Fine bayonets, swords, shooting-canes, Fascinating booklet only 20¢. Kenneth Lane, NRA Life, Tunnel 5, Lausanne, Switzerland (Airmail 15¢), or 1550 Port Austin Road, Port Austin, Michigan.

WINCHESTER MODEL 50 automatics \$120.50. Browning Double Automatics, Standard \$123.00. Lightweight \$133.00. Ruger Single Six revolvers \$63.25. Cherry's, Genesco 50. Illinois.

30 CALIBER 12-SHOT high-power precision Swiss Rifle, silk-smooth action, fine accuracy, low recoil, excellent shooting condition, \$14.95; 48 MC cartridges \$5.00; Hunting ammo \$3.00 per 20. Brochure Free, 32-page Catalog #15 Modern & Obsolete Pistols, Rifles and Shotguns, Obsolete & Hard-to-get Foreign & American Ammunition, Leading Tools, Clips, Magazines, Accessories,—Price 25¢ ppd. Martin B. Retting, Culver City (23) Calif.

DEALERS, JOBBERS, gunsmiths: Famous Service Models, 30-06 and 303 British Enfield 6-shot repeaters, 38 and 45 Smith & Wesson, Colt, Webley and Enfield revolvers, 30-06 and 45 A.C.P. Ammunition, Compasses, zlonered gun-carrying cases, Lowest prices, Shipped duty free, International Firearms Co., 1011 Bleury, Montreal, Que

GUNS AND Fishing tackle bought sold and traded. List 10¢, Agawam Associates, Box 55, Agawam, Mass.

SELECTION OF 500 Shotguns, Rifles & Pistols, foreign and domestic, Illustrated catalogue 25¢, Davis & Sons, Inc., 400 E, Jefferson, Louisville 2, Kentucky.

NEW & USED guns in stock. Buy-Sell-Trade, Jeff. Trader, Pocomoke City, Maryland,

WE WILL buy, we will trade, we will sell, What do you have or what do you want? Over 300 guns in stock at all times. All the hardto-get models, Cherry's, Geneseo 50, III.

SEND 10¢ FOR lists either shotgans, rifles, handgans, ammunition or binoculars; or send 25¢ for all lists, Frayseth's, Willmar, Minnesota,

100,000 GUNS, RIFLES, buy, sell, exchange modern, antique, complete lists, Mutual Exchange, Box 6651, Columbus 9, Ohio,

GUNSMITHING

CUSTOM GUNSMITHING—Rifles made to order, Write for estimate, Fred Holder, 4654 Tennyson, Denver, Colorado.

ILION GUN & Tackle Shop. Custom Gunsmiths, RD2, Ilion, New York, Any make. Restocking, Rebluing. Repairing. Specialized Service on Parkers,

GUNS, GUNSMITHING, Scopes, Stocks, Blueing, Guaranteed, Write Your Needs, Peters Gun Shop, Beloit, Kans.

MILLING MACHINE: Ideal for Gunsmithing, 6" Table Travel, \$149.50 Complete, Southern Machine Tool Co., Conyers 7, Ga.

SHOOTERS: If you are interested in learning Gunsmithing and are willing to spend a few hours in your home shop for a handsome accurate .22 target pistol, send 3 cent stamp for complete information, P.O. Box 362, Terre Haute, Indiana.

GUN CABINETS

GUN CABINETS, Racks, Complete selection, Send 25¢ for Catalogue, Dept, D, Knox Wood Products, Knoxville, Iowa.

HOLSTERS & LEATHER GOODS

DEERSKINS CUSTOM tanned. Five colors, Gloves, handbags, moccasins, jackets, hats handicrafted to your order. Factory prices. Free Catalog. Shipping tags. Custom Sportscraft, 7-9 West, Gloversville 5, N. Y.

CARTRIDGE HELTS and Holster, West style hand carved, \$12.00. Double holster \$16.00. Only holster \$4.00. Send stamps for circulars for Fox hunting horns and for raw long horns mounted, General Mercantile Co., Laredo, Texas,

INDIAN RELICS

5 FINE ANCIENT Arrowheads \$2,00. 6 inch or over flint Spearhead \$5,00. Flint Scalping Knife \$1,00. Skull \$25,00. Clay Peace Pipe from Indian grave \$5,00. List free, Lear's, Glenwood, Arkansas.

6 FINE INDIAN War Arrowheads \$2.00. Flint Thunderbird \$2.00. List Free, Arrowhead, Box 5283, Indianapolis 1, Indiana.

5 ANCIENT ARROWHEADS, \$2,00. 6 Inch or over Spearhead, \$5,00, 2 fine tiny bird arrowheads, \$1,00. Filmt Scalping Knife, \$1,00. Clay peace pipe from grave, \$5,00. Rare Folsom arrowhead, \$5,00. Skull, \$25,00. List Free, Lear's, Glenwood, Arkansas.

ENGRAVING

FINE ENGRAVING on fine guns. E. C. Prudhomme, 305 Ward Bldg., Shreveport, La.

PARTS & SPECIALTIES

NEW-TOP. "Thumbslide" safety for Remington #11-48, #870, #760 & #740—Browning auto, shotguns & Remington Mod. #11. Write for folder. J. Dewey Gun Co., East Hampton, Connecticut.

QUICKDRAW UNDERCOVER Custom grips for Chief, Cobra, Kitgun, Magnum, etc., walnut, smooth, \$8.50, checkered \$9.50 postpaid. Also in rare tropical woods. Free brochure. David Wayland, Box 2446, Hollywood 28, California.

PATENTS

INVENTORS: WHEN you are satisfied that you have invented something of value, write me, without obligation for information. Write Patrick D. Beavers, Registered Patent Attorney, 1099 Columbian Bldg., Washington 1, D. C.

INVENTORS—SEND for free Patent Information book and Inventor's Record, Registered Patent Attorney, Associate Examiner, Patent Office 1922-29; Patent Attorney & Advisor, Navy Department 1930-47, Gustave Miller, 16GP Warner Building, Washington 4, D. C.

RELOADING

30M1 CARBINE HUNTING Reloads \$10.00 per 100, 38 Special \$5.00 Per 100, 220 Swift \$2.90 Per box (20), FOB Ft. Pierce, 150 Gr. Semi-W. C. and 158 Round Nose cast Bullets \$1.50 per 100 Postpaid. Christopher, Custom Reloader, Box 2062, Ft. Pierce, Fla.

CUSTOM RELOADS—your cases—all calibres—.38 Sp. shot loads. Agramonte, 201 Warburton, Yonkers 2R, N. Y.

POWDER MEASURE. Build one, Inexpensive. Full size drawings and instructions \$1.00. L. Truitt, Walcott, Iowa,

SIGHTS - SCOPES - BINOCULARS

GUARANTEED REPAIR service for all makes binoculars and gunscopes. Includes hardcoat-ing, recementing lenses, collimator alignment, posts, crosshairs and rangefinders installed to order. Part replacements and refinishing.
Write or send instrument for free estimate.
Dealers for Bausch & Lomb and foreign binoculars. Seattle Binocular & Scope Repair Co.,
507 Medical Arts Building, Seattle 1, Wash. 507 Medical Arts Building, Seattle 1, Wash, CLEARANCE! BINOCULARS. Deduct 60%, from prices! 6 x 15 prismatic, \$36.00; 6 x 30, \$59.00; 8 x 30, \$65.00; 7 x 50, \$79.50; Brand new, coated lenses, leather cases included, Add 10% Fed. tax). Money-back guarantee. Order now-postpaid! New York Distributors; 1431-6 Canterbury: Dearborn, Michigan.

"WHICH MODEL?", "How to Check Alignment"—Free leaflets by Binocular Experts; 4 century experience. Binocular List with quality analysis. Free repair estimates, Mirakel Repair Co., Mount Vernon 8, N. Y. RINOCULAR SUCCLAISTS, all makes.

BINOCULAR SPECIALISTS, all makes re-paired, including scopes. Authorized Zeiss, paired, including scopes, Authorized Zeiss, Hensoldt dealer. Tele-Optics, 5514 Lawrence, Chicago 30.

WANTED

REMINGTON Hand guns in fine condition. Especially interested in securing a Beal's Pocket Revolver, 2nd Model, W. E. Florence, 43 Berkeley St., Reading, Mass.

WANTED—RARE, odd, unusual automatic pistols. Walther Armee, MP, HP, 9mm BSW new German model, Maxim, Schonberger, un-usual Lugers, Mausers. Want .25 and .32 com-mon pocket autos if excellent or better, Sid-ney Aberman, 1210 Beechwood Blvd., Pitts-burgh, Panna. burgh, Penna.

WANTED—\$1000,00 Cash paid for best deal in Pistols & Automatics, Cannon's Thrift Shop (Nevada's Largest Pistol Dealer), 112 E. Comm. Row, Reno, Nevada.

HIGH QUALITY shotguns and rifles, bolt ac-tion rifles marked "Manuser Werke A.-G. Obern-dorf a.-N." or "Waffenfabrik Mauser A.-G. Oberndorf a.-N.". Carroll Haines, McQueeney,

TAXIDERMIST

FOR SALE-mounted animals, birds, deer heads, fur rugs. African Horns, Glass eyes, scalps, supplies. Hid Hofmann Taxldermy Studio, 10 Brooklyn 21, N. Y. Bargains. supplies. Hides tanned. by Studio, 1025 Gates,

MISCELLANEOUS

SPORTSMAN-HUNTERS Shooter's SPORTSMAN-HUNTERS-Shooter's — Let's Save You Money. Your used gun part payment on new Riffes, Shotguns, Handguns, Ammo, Scopes, Mounts, Reloading tools. Send 25¢ coin or stamps for list-particulars-free hunting tips book, Refunded first order in full. Berkshire Gun Rack, Six Lakes, Michigan. BUY WHOLESALE! 30-80% discounts! Nationally adaptived appliances effor weather.

tionally advertised appliances, gifts, watches, jewelry, etc. For yourself or resale, Large Catalog \$1.00, Hill, P. O. Box 53, Seattle 11, Washington.

LONGHORNS MOUNTED. Handtooled leather 4 to 7 ft. Harrison, 288 W. Almeria, Phoenix, Ariz.

BUY SURPLUS direct from Government, BUY SURPLUS direct from Government, Boat, motor, truck, jeep, hunting, fishing camping, sporting Equipment Radio Photo-graphic, Power tools, machinery & hundreds others listed in our Bulletin "Surplus Sales", Price \$1.00. Box 169UH, East Htfd 8, Conn. "GREEN DIAMONDS" key chain. One dollar postpaid. William Wilson, Box 167, Hilo, Ha-



GUN RACK

(Continued from page 10)

"antique" gun in our "Gun Rack" but unusual circumstances warrant it. From one of the South American countries comes the biggest gun scoop of the year, the purchase by Southeastern Shooters Supply of 20,000 Remington rolling block military rifles in the modern 7mm Mauser caliber for the shooter, and 2,000 Winchester Model 1873 .44-40 rifles for the collector.

The Remingtons are in various conditions, as some have been used pretty much, and others are almost like new, showing only marks of storage and handling. With their color case-hardened receivers, full military walnut stock, and blued barrels and bands, these rifles make exceedingly colorful decorators as well as good shooting 7mms. The 7mm Mauser is held by many to be an excellent deer and all-around hunting caliber. The late Colonel Truesdale was one noted advocate of this caliber, and hunted many bear and elk with his Mauser rifle in 7mm. The Southeastern rifles are inexpensive enough to make ideal "second guns," the sort of rugged. foolproof rifle that you can toss in your trunk before that hunting trip and forget all about it, until you lose the bolt or get tired of scratching the finish off your custom sporter.

The other lot of rifles Southeastern hardly had landed at the docks in New York than they were all sold to one of our foremost collectors' arms dealers, Dick Short of Woodstock, N. Y. Dick might not have been so eager to buy this lot if they were ordinary Winchester rifles, but the lot consisted of about 1,000 new, unfired rifles and 1,000 used rifles, of the incredibly rare full stock military musket pattern complete with bright triangular bayonets!

Since the news of this incredible purchase leaked out, already price adjustments in the value of these previously almost unobtainable rifles have occurred. Now, with the lot being examined and catalogued by Dick Short, the Winchester collector can obtain one of these interesting and rare rifles at moderate cost, To discover a cache of guns like these is only a little worse than discovering a quantity of Walker Colts, and Southeastern is to be given credit for digging these out of hiding in some South American arsenal where they have been untouched for more than half a century.

I have examined one of these "unfired" guns and it is really a beauty. Again, there were some scratches in the finish due to recent careless handling, probably in the Port of New York customs hands as the marks were bright and fresh, but otherwise the gun was absolutely new and perfect, not a sign of wear. This news will make a big stir in collectors circles, and should stimulate a lot of

casual guys into starting to collect Winchester arms.

Portable Loading Bench

The Huntington Press bench, made by E. H. Huntington of P.O. Box 4144, Portland 8, Oregon, has an important use for the apartment-dwelling handloader. Made of heavy plywood with iron reenforcements and a wall mounting bracket, the bench is built after the style of a Pullman car table, folding against the wall when not in use. Size 32" wide by 12" to the wall, the bench will support most common loading presses while the added space holds loading supplies, bullet blocks, and so forth. It is a useful and compact accessory for any place where a compact but durable loading bench is needed. Two steel pins fasten it to the mounting plates so it can be quickly dismounted. Price is \$24.95.

Snap Shots

Tradewinds, importers of the Husqvarna rifles, has added two new items to the line. First is the Mercury Magnum shotgun double 10, and a 20, both at \$125 each. Also they sell a magnum sized Mauser action for large cartridges, made by Brevex of Paris. Comes finished, white, ready to barrel, stock and blue, price \$118.50 . . . The National Wildlife Federation, 232 Carroll St., N.W., Washington 12, D. C., offers three beautiful color prints of pintails, Canada geese, and mallards, suitable for framing, for \$5 . . . The Director of Civilian Marksmanship now sells Garand rifles at \$98.00 . . . Norma makes straight cases based on the .30-06 for 8mm heads, and the bigger .375 Magnum heads, for handloaders to neck size to their own pet designs of wildcats. Precision Tool & Gun Co. of Ithaca, N. Y., and Weatherby of South Gate. Cal., both sell these new cases for handloaders . . . Bob Thomas, the scope dot man of Silver Spring, now does business as "Premier Reticules," at Dept. NP-1, 8402 Fenton, Silver Spring, Maryland, His latest is the Premier Dot which is perfectly round under all conditions of sighting when mounted on scope crosshairs. For installing, prices range from \$7.50 to \$12.50 in your scope . . . Do-It-Yourself has invaded the gun cabinet field with a series of plans for handsome gun cabinets put out by Colodonato Bros., of Hazleton, Pa. Their guide and catalog sells for \$1 and is full of useful cabinet-making tips and instructions . . . United Binocular Co. of 9043 S. Western, Chicago 20, now offers a 7 x 50 marine-type binocular which can be quickly modified to increase power to 12x. Price is only \$55 on a 30-day trial refund basis-what can you lose? . . . A portable metal-frame dark canvas blind for duck hunters is made by Porta-Blind Co., 422 N. Senaca, Wichita, Kansas. Will hold two hunters, sells for \$30. Holds guns and ducks, too!



FIREARMS LIBRARY

(Continued from page 47)

must for every gunsmith and gun nut. A detailing of a few stories: Charlie Askins' personal reminiscences of his friendship with master marksman Ad Topperwein; Tage Lassen's detailed study of oldtime black powder loads, and by oldtime Mr. Lassen means 16th century; a critique of gun engraving by that master workman, E. C. Prudhomme, beautifully illustrated with clear pix of many fine engraved guns showing types of work; mallard shooting in Mexico; and a bang-up scoop survey of the new Winchester and Remington .243 and .244 varmint-big-game loads by Warren Pope. This new Gun Digest is a good pack of reading and data for two-fifty.

CALIFORNIA by John Walton Caughey (Prentice-Hall \$9).

One of the main purposes of collecting firearms of the Old West is to learn about the men who used them and the raw and rugged times during which they were used. No one-volume history of the great state of California can do full justice to every period in its exciting history, but John Caughey's nearly 700-page book comes close to it. From the earliest Spanish days and the Indians before to a final look at "The Scene at Mid-Century," this book well portrays California.

THE LUGER PISTOL by Fred A. Datig (FADCO, Beverly Hills, Calif., \$7.50).

Written with the intention of becoming the basic reference on the Luger pistol, this illustrated 208-page book accomplishes just that: dates of production, totals made for commercial, military, and contract sale, types including rare or unique variations, historical data on the activities of Georg Luger and Hugo Borchardt, co-inventors of the Luger pistol. All combine to make this little book one of the most important texts on firearms to be produced in many years. Written in a careful yet not pedantic manner, "Luger Pistols" is a necessity for any collector of automatic pistols or for any dealer who wishes to be well-informed. The only drawback lies with the printing reproduction of the photos, which run to black more than necessary. Should this 2,000 limited edition ever go into a second printing, new and clearer plates of illustrations will make this a distinctive book in the firearms field.

THE INDIAN AND THE HORSE by Frank Gilbert Roe (University of Oklahoma Press \$5).

What the gasoline engine is to modern civilization, the innovation of the horse was to the formerly pedestrian Indians. Roe's study of the many aspects of Indian culture as affected by the horse is a graphic and thorough presentation of the most important single element of Plains Indian culture. Reviewing Oklahoma Press books becomes monotonous—they are uniformly good, and here again is a distinguished contribution to Western Americana from their presses. It is worthy of study by anyone interested in the cultural background of the time when Indian Winchester and Cavalary Springfield battled for the right to rule America.—W.B.E.



brand new*6MMs

100 gr. 100 gr. 85 gr. 75 gr. Spitzer Semi-Point Spitzer Hollow-Point

The new 6mm 75 gr. HOLLOW-POINT and the new 6mm 100 gr. SPITZER complete the SIERRA 6mm family. Precision-made, field-tested, SIERRA bullets meet every 6mm shooting requirement.

FREE and post paid, an exciting, new, illustrated brochure about Handloading. It tells how you can get into this fascinating yet inexpensive hobby and discover the pleasure and satisfaction of handloading and shooting your own ammunition. Write today. Dept. RA501.





FOR TARGET OR GAME...TRUE TO THEIR AIM

BENCH REST BARRELS

BUILT

TO YOUR
SPECIFICATIONS

FITTED

TO YOUR

CHROME-MOLY OR STAINLESS STEEL

> For the finest specify JAA barrels

JOHNSON AUTOMATICS ASSOCIATES

INCORPORATED
HOPE VALLEY, RHODE ISLAND

RELOADERS!

B & M OFFERS YOU A COMPLETE SERVICE

Tools & Equipment

B. & M. #28 Straightline Reloading Tool,	
complete	\$19.50
	15.75
Extra set Dies of above	.10.75
IDEAL Tru-line Jr. Press Complete	25.00
Extra set Dies for above	10.00
PACIFIC Super Tool, complete	39.95
Extra set of Dies for above tool	
Extra Shell Holders	
Extra Primer Arms	3.00
B & M Visible Powder Measure, regular	12.50
B & M Visible Powder Measure, Micrometer PACIFIC Powder & Bullet scale	14.00
PACIFIC Powder & Bullet scale	10.95
REDDING Scale, latest model	14.00
B G M Stainless Steel Cleaning Rods 1 pc.	3.00

BULLETS

Complete stock - All calibers & weights of Sierra, Speer, Hornady, Remington, Winchester. Western, Norma, and Jordan. Also empty primed Cartridge Cases, Primers and Percussion Caps of all popular makes.

POWDERS

Complete Stock - Dupont & Hercules

Everything to Service The Nation's Shooters.



NEW 1956 B & H HAND BOOK
Tells you how to reload in easy
to follow instructions. Shows
how to save 50 to 85% of
your shooting costs. \$1.00
SEND FOR FREE FOLDER
Dealers write for Discount
Schedule

BELDING and MULL

PARTING SHOTS



"What's the matter, boys? Didn't the animals cooperate?"



Home of

Strebco Products

"GUNSMITHS & GUN DEALERS FOR THREE GENERATIONS ..."

Always Satisfaction Guaranteed!



Heavy Frame

We can supply new parts to convert the Model 1917 .45 ACP to other call-

(NOT WORKED-OVER 455'S)

With plain wood military Grips -

With GENUINE STAG GRIPS, as illustrated \$21.90. (Stag grips not sold separately).

Two holf-moon clips included FREE. All guns have been arsenal overhauled. Dull finish, 5½" borrels, tight actions. Good shooters & backed by our money back guarantee.

HOLSTERS FOR MODEL 1917: Sold with gun only. Special cowhide — a \$7.50 value for only \$3.95. Or fancy carved leather holsters — a \$14.00 value for only \$6.95. None sold separately at these special prices

.38 S & W caliber MILITARY REVOLVER

A Sturdy Six-Shooter



FAMOUS SERVICE MODEL double action 6-shooter with swing-out cylinder. Positive locking. Walnut grips. 5" barrel with fixed sights. Weight 31 oz. Very good to excellent. Bore perfect. An unmatched value while they last.

GOV'T SURPLUS .22 RIFLES AND PISTOLS

MOSSBERG MODEL 44 U. S. .22 TARGET RIFLE \$19.95

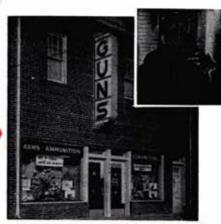
Speed-lock, thumb safety, grooved trigger, adj. peep sight, target stock, heavy 26" target barrel, 11/4" sling swivels, 7-shot clip. "Like -marked "U. S. Property". Bona fide proof of ownership given with each gun.

HIGH STANDARD MODEL B 10 SHOT



Super Special Buy! CHROME-LINED BARRELS

WILL FIT MAUSER 98 & F.N. ACTIONS - .30-06 & .270 CALIBERS Threaded, finish-chambered, blued, chrome-lined—ready for fitting with minimum effort—



WE ARE DISTRIBUTORS FOR THE FOLLOWING:

Astra Pistols . . . Beretta Pistols . . . Franchi Shotguns . . . Great Western S. A. Revolvers . . High Standard Pistols . . . Iver Johnson Pistols, Rifles & Shotguns . . . Le Chasseur, Llama, Star, Walther Pistols . . . Mannlicher-Schoenauer Rifles . . . Marlin Rifles and Shotguns . . . Steyr & Sako Rifles . . . Buehler Mts., Pachmayr Products, Gun Cases, Norman-Ford Scopes, Grips, Powder, Holsters, Hornady Bullets, Lyman Scopes, Handloading and Sights, Hoppe's Cleaning Accessories, Pecar Scopes, RCBS Dies, Redding Scales, Swivels, Williams Sights, Mounts, etc., Norma Bullets. Factory Installers of Poly Choke . . . Cutts Compensators . . . "If we job it—we have a complete stock on hand for immediate delivery, including the so called 'scarce items'." Full dealer discounts on the above listed items. Request on your letterhead will bring our road man to your door.

NEW ENFIELD PARTS

Ea	eh	Dozen
Extractors		\$13.00
Bolts with collar I.	.00	10.00
Handguards, rear or fr.	50	4.00
Strikers, (firing-pin)		3.50
Ejectors		5.00
Magazine box	.00	10.00
Cocking piece		10.00
Bolt step springs	25	2.00
Floor plates	.00	8.00
Trigger guards t.	.00	8.00
(One each of the above 10 scarce)	parts,	\$6.95)

SPECIAL MILITARY PARTS

Springfield stripped Nickel Steel Bolts,	ea\$3.00
Mauser 98 stripped Bolts, each	3.00
New Commercial Bolts-low handle & bolt knob, polished, each	
Mauser 98 Bolt Sleeve, complete with safety, ea.	
Mauser Cocking Pieces OR Safeties, ea	ch75

PARTS FOR .38 M & P: (Will also fit VICTORY Model) Barrels, 5" dull fin. @ \$3.95; Grips, smooth walnut, per pair .50c; Hammers, new, complete @ .75c; Cranes, new @ \$1.00; Triggers, @ \$1.00; Hands .50c.

(In dozen lots only-each unit 25% less)

STREBCO

guns, parts and

components, Cat-

alogue No. 6. \$1.00

BLU-BLAK **SUPERBA** BLUEING SERVICE

Blu-Blak means SUPERIOR Blueing. Over 2,000 rifes, pistols and shotguns blued each year. Superior today for the story of BLU-BLAK-SUPERBA, a full dollar value. Write for prices.

prices. "STREECO" CATALOG #6-Only \$1.00 Post-

paid. TERMS: Cash with order—Immediate shipments

. . . other Super Special '98 Mauser parts

Trigger Guards, beautifully blued, milled steel, stripped, each \$3.95. Complete Trigger Guards, each, \$5.95. Bolts, stripped, each, \$3.95. Bolts, new, for low scope, checkered bolt knob—commercial type, each,

Bolts, new, for low scope, checkered bolt kmob—commercial type, each, 57.00.
"STREBCO" Imported Set-Triggers, with sear, each \$7.95.
Bolt Sleeve, each 50e,
Low Safety with Bolt Sleeve, new, complete unit, each \$3.95.
"98 Trigger Unit, includes sear, spring and pins, complete unit, each \$1.98.
Servers, each, 25c.

MINIMUM ORDER \$10.00—NO COD'S

IMPORTANT! Send pistol affadavit with order—pistol shipped by express.

N. F. STREBE GUN WORKS

5404 Marlboro Pike, Washington 27, D. C.

norma

HUNTING and TARGET AMMUNITION

SMASHING POWER

FELLOW SHOOTERS AND RELOADERS:

Whatever you shoot ... from bench rest to big game ... you will find a NORMA Cartridge and Precision Bullet to fit your type of shooting.

NORMA soft point, round nose, and hollow point bullets deliver real smashing power in all types of game.

For target shooting, NORMA full metal patch Precision Match Bullets are noted for their consistent accuracy. Take your choice from a variety of American and foreign calibers, weights, and styles.

Marksmen the world over place their confidence in NORMA quality. NORMA is the choice of several World Olympic Championship teams and has received enthusiastic endorsement from famous big game hunters.

AMMUNITION—BULLETS:—UNPRIMED CASES
American and Foreign Calibers

You will like NORMA, too. Next time you shoot, try a box of NORMA Ammunition. If you reload, try NORMA Precision Bullets and Unprimed Virgin



bullets is sudden—swift—and sure in all types of game—at all ranges.

NORMA's clad steel jacket consists of a tough steel core laminated on each side by a layer of cupro-zinc alloy. In the game, the tough steel resists to the right degree the enormous centrifugal forces set up when the rotating bullet starts to mushroom, insuring perfectly controlled expansion at all hunting ranges.

ALWAYS REMEMBER

You don't kill your game at muzzle velocity. It's your remaining velocity that counts! NORMA precision bullets and ammunition are designed to give maximum velocity and smashing power even at the longest ranges.

Try a box today. On sale at better sporting goods dealers everywhere.

25c for Complete NORMA Catalog



AB NORMA PROJEKTILFABRIK Amotfors-Sweden

PRECISION TOOL & GUN CO.

South Lansing, New York