

Widefield goes Variable!

Another brilliant break-through in scope design by Redfield . . . available now in 2X-7X and 3X-9X. The Widefield Variable multiplies the advantages of the Widefield concept: 22% wider field of view at higher powers, 15% at lower powers.

Now you can spot game easier, pick out the trophy at the edge of the herd; sight faster with all that extra field; lead more accurately on moving game . . . at any power you choose. Add ACCU-RANGE®, and you'll know the distance, too!

Same rugged construction, superior optical system and dependable performance you expect from Redfield.

See the 2X-7X and 3X-9X now - along with the already-proven Widefield 2%X, 4X and 6X fixed powers - at your dealer or gunsmith.

Widefield gives you the edge.

Bediffe of 5800 E. Jewell Avenue • Denver, Colo. 80222

Free catalog on request



First issues of four famous old gun magazines bound together in one great volume!









\$2.95 Retail

The NRA COLLECTOR'S SERIES

Commemorating NRA's One-Hundredth Anniversary

Announcing a rare find and a major event in the field of gun book publishing! In honor of the 100th Anniversary of the NRA, Digest Books has reprinted a COLLECTOR'S SERIES of rare gun magazines – landmark issues of four famous titles from the past. Three of them were first issues of each of the predecessors of the American

Rifleman. The fourth was American Rifleman's historical first issue.

Now you can have all four, handsomely bound together, for only \$2.95 - a price that would be a terrific bargain for the 1st issue of the American Rifleman alone! The Series is published exclusively by Digest Books, Inc.

Page-Upon-Page of **Great Action Features**

- · America's Crack Rifle Shots
- Rifle Matches for Veterans
- The Bennett-Paine Revolver Match Controversy
- Teddy Roosevelt on Civilian Rifle Clubs
- Instruction in Rifle Practice
- The Classic Annapolis Match of 1923
- Plus terrific fiction, novel old advertisements, good-as-new gun and shooting info

DI	OPC	TD	00	IZC	TAIC
W.	urbo	1 D	UU	VO	, INC.

(Formerly Gun Digest Co.) 540 Frontage Rd. Northfield, Ill. 60093 Dept. P-460

- Please send me_____sets of the COLLECTOR'S SERIES of 4 rare old gun magazines @ \$2.95 per set, ppd.
- Please send me (ppd.) the Digest Book(s) checked at right.

Enclosed is my check or money order for \$

Street_ State___Zip

Check the books you wish to order:

CAMPER'S DIGEST, 1st Edition. \$4.95

GUNS ILLUSTRATED 1971

3rd Edition. \$2.95 SKIER'S DIGEST, 1st Edition

GOLFER'S DIGEST, 4th Ed.

. \$4.95 HOME GUNSMITHING

DIGEST, 1st Edition. . . \$4.95

SILVER ANNIVERSARY 1971 GUN DIGEST....\$6.95

HANDLOADER'S DIGEST, 5th Edition......\$4.95

AGE OF FIREARMS, new revised Edition. \$4.95 CARTRIDGES of the WORLD, 2nd Edition. \$6.95

GUN DIGEST TREASURY 3rd Edition. \$4.95

SINGLE SHOT RIFLES & ACTIONS, 1st Ed.....\$7.95

HOW TO CONVERT MILITARY RIFLES, 6th Ed. .\$1.95

1908 SEARS, ROEBUCK CATALOGUE 3.95

1894 MONTGOMERY WARD

CATALOGUE. \$4.95 1896 MARSHALL FIELD CATALOGUE......\$4.95

1900 SEARS, ROEBUCK

CATALOGUE.....\$1.95 Please buy at your local store, or order by mail

30 DAY FULL REFUND PRIVILEGE. FREE BOOK CATALOG INCLUDED WITH EACH ORDER, OR SENT UPON REQUEST



THE threat of more anti-gun laws coming out of Congress is still with us, as long as certain of the legislators use their mouths before using their brains. The latest utterances from the loudest anti-gun member of Congress, Illinois' own Abner Mikva, are perfect examples of this.

According to the latest reports, he intends to begin an education program to convince members of Congress that gun control is necessary. (Perhaps it would be better if someone would begin an education program to tell Abner that we already have "gun control" in the U.S.). Mikva also says that he will try to convince the legislators that they will not be committing political suicide if they vote for more controls. (This may be difficult in view of the recent elections).

Mikva will re-introduce his bill to ban the sale and manufacture of handguns, which was not acted upon during the last session of Congress (see GUNS, July, 1970). However, even he admits that it has little chance for passage—yet we cannot shrug it off. We must continue to conduct our own education program to counter Abner's teachings in his Claptrap College.

PERSONAL: The editor would like to get in touch with two fine artists who seem to have dropped from sight; at least we have lost touch with them. They are: James Triggs, and George E. Cornelius. Do any of our readers know their whereabouts?

THE COVER

Symbols of success. Shown here are two Browning auto shotguns. One is serial No. 2,000,000, which will be preserved in the Browning Museum, the other is one of a series of 2,500 commemorative models which will be offered at \$575. Photo courtesy Browning Arms Co.

APRIL, 1971

Vol. XVII, No. 01-4

George E. von Rosen Publisher



CONTENTS

FEATURES

WINGO Report on the latest shooting sport	James D. Mason 20
CASED HISTORY OF COLT Part Three of a series	James E. Serven 23
FOREND TIP Distinctive touch to your stock	Jim Carmichel 26
MODEL 1903 SPRINGFIELD RIFLE A historical look at this old gal	
ERMA TOGGLE-JOINTS Test report on two new pistols	Mason Williams 32
DIXIE GUN WORKS A look at the Tennessee ML Supermarket	tMaj. George C. Nonte 34
COLLECTING REMINGTON KNIVES A part of Remington's past	
GUNS COLOR GALLERY Colf Roof revolver	Dr. R. L. Moore 40
SET OF FIVE Five exquisite guns from Holland & Holland	and
FREE GUN CONTEST Win a Browning Automatic shotgun	44
GUNS AMERICANA Matt Warner, Butch Cassidy's teacher	E. Dixon Larson 46
HUNTER'S NOTEBOOK Hunting the German red stag	
DEPART	MENTS
Shooters Club of America	Arms Library 45 Pull! Dick Miller 52 Shopping With Guns 60 Questions & Answers 62 Index of Advertisers 75 The Gun Market 78
Jerome Rakusan Editor Harold A. Murtz Associate Editor E. B. Mann Contributing Editor Col. Charles Askins Shooting Editor Maj. George C. Nonte Handloading Dick Miller Trap Robert Mandel Antique Arms Wm. Schumaker Gunsmithing Shelley Braverman Modern Arms	Col. Rex Applegate Police Maj. George C. Nonte Military Les Bowman Hunting Don McEvoy Sales Manager Sydney Barker Art Director Andrew Molchan Advertising Sales Irving Karchmar Advertising Sales M. Gross Ass't Circulation Mgr. Sally Loges Subscription Mgr.









EDITORIAL OFFICES: Jerome Rakusan, 8150 N. Central Park, Skokie, III. 60076, ORchard 5-5602. NATIONAL ADV. OFFICES: 8150 N. Central Park Ave., Skokie, III. 60076. ORchard 5-6010.

GUNS Magazine is published monthly by Publishers' Development Corp., 8150 N. Central Park Avenue, Skoide, Illinois, 60076, Second class postage paid at Skokie, Illinois, and at additional mailing offices. SUBSCRIPTIONS: One year (12 issues), 87.50. Single monthly copies, 75.6. CHANGE OF ADDRESS: Four weeks' notice required on all changes. Send old address 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. PAYMENT will be made at rates current at time of publication and will cover reproduction in any or all GUNS Magazine editions. ADVERTISING RATES furnished on request. Copyright 1971 Publishers' Development Corporation. All rights reserved. Title to this publication passes to subscriber only on delivery to his address.



News from the ...

SHOOTERS CLUB OF AMERICA

Dedicated to the Constitutional Right of Every Citizen to Keep and Bear Arms

U.S. SENATE STABS HONEST GUN OWNERS IN THE BACK

On December 21st the U.S. House of Congress passed the Ullman bill H.B. 14233. This bill would exempt record keeping requirements for .22 rimfire ammunition from the 1968 Gun Control Act. However, the foot dragging 91st Senate tied up this bill in committee where the voice of the people is never heard.

The members of the house are elected for only two years and have more contact with the grass roots of public opinion. Senate members are elected for six years with many seats held by old time machine politicians who have lost touch with the people they are supposed to represent. Time and again the Congress has listened to the many organizations like SHOOTERS CLUB OF AMERICA and has introduced and passed legislation that makes sense for the sportsman. But time and again a few people on Committees and on the floor have side-tracked the majority.

Opposition to the Ullman bill came from Rep. Emanual Celler (N.Y.). He used all the old tired arguments that keep coming up from people who do not know what they are talking about. In opposition to this bill, Celler asked, "What kind of gun killed Robert Kennedy? A revolver with rimfire ammunition bullets. Unless you have some control over ammunition there is no control over guns. Without its ammunition a gun is about as useful as a scabbard without a sword," the aging Mr. Celler said. The facts of the matter are these: the Federal Government has used our tax money to record the 80 million sales of .22 ammunition from the time the 1968 bill was enacted. It has created a mountain of paper work and a legion of Federal paper shufflers, and it has subjected millions of sportsmen to much unwarranted aggravation. So what is the end result? The Justice Department itself has testified that despite the tremendous cost and aggravation of recording .22 sales, it has not solved one crime or achieved one conviction through a record of sales. It staggers the imagination when you think of all the money the Government has spent and all the aggravation it has caused, and for absolutely nothing.

The politicians, rather than learning from their mistakes with past firearms legislation, keep on pushing down the same old wrong road. There was a recent meeting in Gary Indiana where Mayor Richard G. Hatcher brought up an old subject, the complete ban on all manufacturing of handguns except for the Army and the Police. The Mayor told his audience, "a handgun is designed for just one thing, killing or injuring another person. Why not go to the source to keep people from getting guns — to the manufacturers?" he asked. Hatcher said criminals often get guns from people who have them in their homes for protection but "probably wouldn't know how to use them anyway."

The basic proposal of the anti-handgun group is that all sales of handguns would be stopped except to the Army and Police. And all registered handguns would be confiscated and destroyed. Then the reasoning goes, their would be few armed robbers and only a few murders because their would be very few handguns. Naturally this whole idea is absolutely ridiculous. Anyone with basic knowledge about the firearms field knows that this would cost millions of dollars, if not billions, would create tremendous hardship for the honest sportsman and gun collector, and it would solve absolutely nothing in preventing crime. The underworld has enough guns to keep itself supplied for years even under the tightest ban. Also, the blackmarket manufacture of guns would thrive under this kind of law.

The politicians should stop thinking about "anti" laws and start thinking about "pro" laws. Crime in America is not going to be stopped with "anti" laws. There is no easy solution. Money is going to have to be spent on the problem areas of slums where violent crime is born, and money is going to have to be spent on prison reform. When we start to save slum children from a life of crime, and when we convince convicts in prison that crime really does not pay, then our problems will start to be solved.

In the mean time, the SHOOTERS CLUB OF AMERICA needs all the help it can get to stop blind politicians from going ahead with anti-gunowner laws. If we do not fight them with true facts they will create a Federal monster that would mean the end of all gun collecting and game hunting. Join the SHOOTERS CLUB OF AMERICA today and help to keep the Congress from making a great mistake. Fill in the card on this page and mail it in today.

SUPPORT YOUR RIGHT TO OWN AND USE FIREARMS!

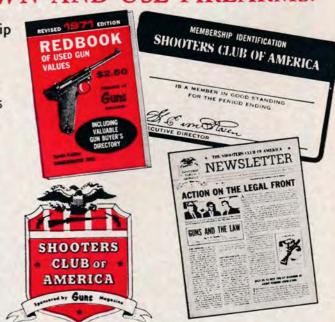
You Get All These Valuable Benefits With Your Membership

- SPECIAL SHOOTERS CLUB LEGISLATIVE NEWSLETTER
- NEW 1971 REDBOOK OF USED GUN VALUES—A \$2.50 VALUE!
- CLOTH EMBLEM

- NUMBERED MEMBERSHIP CARD
- . OFFICIAL DECAL
- 20% DISCOUNT ON SHOOTING, HUNTING AND FIREARMS BOOKS

JOIN THE S.C.A. TODAY!

MAIL THIS
HANDY
POSTAGE-FREE
ENVELOPE TODAY!





Hornady's new 38 caliber lead bullets have been a long time getting to your dealer's shelf... but for good reason: We didn't want to make just another lead

bullet, but one that would meet our high accuracy requirements and eliminate the problems that others have had with non-uniform lubrication.

We tried many methods...but finally built our own precision machine that turns out uniform bullets with just the right amount of lube. We also developed our own system for coating the bullets to prevent them from sticking together and pulling the lube off...a coating that isn't dirty and messy to handle. As with all Hornady bullets, we test fire for accuracy and uniformity throughout every run.

Try a box. Discover the unmatched Hornady quality and uniformity in a new line of lead bullets.





On Stevenson

Congratulations on the addition of Jan Stevenson to your staff. His first article in the January '71 issue "Safety First" should be read by one and all. A short while back I had my second accident with a supposedly unloaded gun. Some 14 years ago I was certain that a .45 auto wasn't loaded, but the hole in the ground about three inches from my foot proved otherwise. About months ago I had my second accident with dry-snapping a Colt Gold Cup. I put the gun away at night and when I got up the next morning I decided to snap it once more. Unfortunately I forgot that I had left a full clip in it with one in the chamber the night before when I was through snapping. There was a fine dark spot on the light green carpet in my hotel room, a \$25.00 bill for damages and a rather lengthy explanation to the manager for my mistake.

I have been fortunate twice that no one was injured or killed. There's no room for number three. There was no room for the first two! When the gun goes into the hand, the mind had better go into gear. Take it from one who has learned, the hard way.

Berry Allen Port Arthur, Texas

I have just finished reading Stevenson on Handguns entitled "Safety First." It was nothing short of fabulous. I only wish it was mandatory reading for every purchaser of a hand gun. This would be ten times as beneficial as any of the new firarms laws.

John Lipski Wyoming, Pa.

Editor's Support

Congratulations on your really great "Trigger Talk" in the January '71 Guns. You really hit the bullseye!

There are a hell of a lot more peo-

ple "plinking" than there are putting holes in paper and they are having a whole lot more fun. Keep on with the articles and stories like "Pocket Pistols at 100 Yards." We really enjoyed it

> Dr. S. B. Richards Evanston, Ill.

First let me say that Guns Magazine is one helluva magazine for any gun nut whether he be a neophyte or a veteran. I agree 100% with your Jan, '71 "Trigger Talk" column.

I shoot small and big bore pistols and get a heck of a kick out of shooting them at empty oil cans, etc. Even more so than using my .22's on them! It's not rare to find me blazing away at an apple placed in front of an adequate backstop with my Remington 700 ADL in .243, or shooting a can tossed into the air with my Charles Daly 12 gauge double. I happen to find bench-rest shooting extremely boring. However, I don't berate the guy who does enjoy it. Lets have more articles like "Pocket Pistols at 100 Yards." They appeal to the average shooter. You have a wonderful magazine and a great bunch of writers. Keep up the good work.

> Dave Kafader Indianapolis, Ind.

Editor's note: Another article by Neil Smith will be published shortly and it should be just as good as his last.

Another Coffee Mill

After reading the article on the Sharps Coffee Mill carbine (Nov. 1970) I happened to stop at the Chicamauga National Military Park, Fort Oglethorpe, Georgia and found another Coffee Mill carbine. Located on the piece was: "Sharps New Model 1863 C. Sharps Pat. Oct. 5, 1852-R.S. Lawrence Pat. April 12, 1859". This gun is one of the many in the large Fuller collection on display at Chicamauga Battlefield.

Gary Head Fayette, Ohio



EASILY SATISFIED?



If not - look at Blacks wide selection of lightweight outdoors equipment for the hiker, climber, canoeist or cyclist, including

GOOSE DOWN BAGS LIGHTWEIGHT TENTS ANORAKS & PARKAS FRAMES & RUCSACS STOVES & COOK KITS

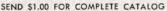
for full details

ASK YOUR LOCAL DEALER or SEND FOR NEW 1971 CATALOG



930G, Ford, Ogdensburg, N.Y. 13669 Also Ottawa, Can. & Britain







Austin Boot Co.

P.O. Box 12368-G EL PASO, TEXAS 79912



HANDLOADING

By MAJ. GEO. C. NONTE

AS IT STARTS out, this seems to be my day for bitching. As if I didn't already have plenty of complaints stored up, last weeks film processing is still held up, and the .45 Auto I just conducted extensive surgery on doesn't work right. Oh, well———.

A few weeks ago I got on a plane here in Peoria, headed for some pig hunting in Florida, then the National Police Matches in Mississippi. Perfectly normal pursuits, I thought. The first air line (Ozark) objected not at all when told that I had four handguns and ammunition in hand baggage I wished to carry aboard. Carrying them aboard seemed the only sensible thing to do since various baggage handling outfits had ruined one camera and three pieces of luggage in weeks just gone by.

Ah, but things were to change. In St. Louis I reported for my TWA flight and showed the agent the guns. "Sorry," he said, "They must be checked; we can't have them in the passenger or crew compartments." "Okay," I said, "but carry them directly to the plane and I'll pick them up at the gate on landing." Simple? It would have been if instructions had been followed, but they weren't, and my guns wound up being kicked and tumbled through the usual baggage handling routine.

So, the agent took my guns, then walked me through the metal (read gun) detector. No dice; the needle moved too far. So, I started shedding metal: kevs and comb; still too much. Try again. In the end, before being cleared to board the aircraft, I was required to make eight (8) (that's right) passes through the detector while waiting passengers viewed the entertainment. By then I'd been forced to shed my pen, keys, change, nail clipper, comb, wallet, watch, eye glasses, silver moustache wax box (What the hell!), bolo tie slide, and a couple empty cartridge cases somehow lodged in a jacket pocket. Just as I was reaching for my belt buckle so as to shed my pants and their metal fly zipper, the detector needle finally

dropped low enough and the agent certified me weaponfree. (Remember, I'd already given him my guns and ammo.)

Were they through so I could get on their damned airplane? Not by a damn sight. Before I could board, my briefcase had to be searched in detail.

Result: I don't fly TWA anymore and appropriate letters explaining my feelings and actions have been dispatched to top management. As part of that same trip I rode Delta, Frontier, Ozark, and American. None of those airlines objected to my guns when told about them, nor did they subject me to the harrassment favored by TWA.

To top it all off, I recall TWA promoting itself as "The Sportsman's Airline" a few months back. Not this sportsman's, it ain't.

. . .

While I have no personal knowledge of handloaded ammunition being used in crimes of violence, there is no reason to believe it hasn't happened. After all, many shops sell handloads right alongside the factory stuff. Even so, it came as a bit of a surprise to learn that at least one current investigation involves running down some purchasers of certain-caliber loading dies

There can be legitimate reasons for such investigations. For example, cases can be traced to the die that resized them through various marks made by the die in the soft brass. This could be instrumental in identifying an illicit source of sale; or in establishing that a person did or did not knowingly supply handloads for criminal use.

Consequently, we're not knocking legitimate investigative efforts and procedures. However, we wonder if the future might see handloaders subjected to police pressures, as are handgun owners in some areas already. In the current climate where some people will seek out and use any method of reducing private gun ownership, this is a possibility.

(Continued on page 10)

CENTENNIAL GOES DIRECTLY TO THE PUBLIC BUY NOW !!! SALE LIMITED TO QUANTITY ON HAND



WAS \$89.95

Now \$59.50

1860 COLT NEW MODEL ARMY

Engraved Scene, .44 Cap & Ball Revolver. Now better than ever; beautiful pistol with an 8-inch barrel, walnut grips, blue finish and round cylinder. NOW special finely engraved cylinder at no extra charge. Has a special steel trame, casehardene. at no extra charge. If

Made in Belgium, fully proofed in famous Liege Proof House.



WAS \$89.95

NOW \$58.50

A reproduction of the Famous Remington Civil War gun. Top strap and rugged frame, perfectly suited for the .44 cal. charges. A very reliable Civil War type re-volver, fine shooter. Made in Italy, proofed.

Also available in .36 cal. Please specify caliber.

NOW STRONGER

THAN EVER

Model 1863 ZOUAVE Reminaton

.58 Cal.



WAS \$99.95

Rifled 33" barrel. The Model 1863 was, in its original form, a composite of the best features of the time. Lock plate is marked with an eagle. Lock, lock plate and hammer are casehardened, blue-black barrel. Trigger band springs, and screws are blued. Butt plate and other fittings in brass. Sights; front blade, rear 3-notch type graduated in 100, 200, and 300 yard increments. Made in Italy, proofed.

FINEST PERCUSSION SHOOTING RIFLE ON THE MARKET TODAY!

Now \$79.00 .44 Cal.

THE KENTUCKY RIFLE

Available in either Percussion or Flintlock. Please specify.

Length 50 inches, Octagon barrel, 36", casehardened finish, walnut wood stock, light engraving in patchbox and side plate. Fine Quality

Retail \$139.00

Special \$89.00



Steel Casehardened Frame

Steel frame, casehardened, engraved cylinder, octagon barrel, similar to the Army. Made in Italy, proofed.

WAS \$69.95

NOW \$39.95

Also available in .44 Cal. Please specify Caliber.

GR III Tower

REVOLUTIONARY WAR FLINT HORSE PISTOL CAL. 69

Replica of the famous British Tower flintlock pistol; brass mountings, these are visually a "knock out". We sell these smooth-bore Cal. .69 pistols for decorators.

WAS \$39.95

Now \$20.00



WAS \$49.95 .36 Cal. \$31.95 .44 Cal. \$34.00 Please specify caliber

.36 Cal. Sheriff's Model Same as .36 Brass Navy, EXCEPT with 5" Barrel Now \$30.95

No C.O.D. Order MUST be accompanied with payment. Allow \$3 per rifle for handling, packing, shipping and insurance fees and \$1.50 per pistol (No Stamps). If shipping costs not received, merchandise will be shipped out via Railway Express COLLECT. Every shipped F.O.B. Chicago. M.O. and Certified Checks handled first, all other checks held 2 weeks. Open for sales on Saturday only, 10:00 A.M.—4:00 P.M.

Muzzle Loaders are exempt under Government Regulations and may move freely in interstate commerce, but PLEASE include a statement that you are over 21 years of age and there are no local restrictions against purchasing this piece.

SPECIAL CLOSE-OUT SALE ON FLASKS & MOULDS (add 75c each for handling & shipping)



Flask with Adjustable Brass Charger for Rifles, Large Walker or Dragon type pistols

Retail \$15 SPECIAL \$8.90



ZOUAVE FLASK Brass

Retail \$12 SPECIAL \$7.90



COPPER FLASKS Retail \$9.95 SPECIAL \$6.90

Please specify caliber

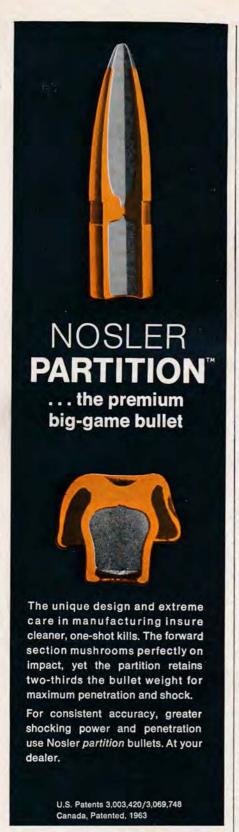




BULLET MOULD .36 or .44 Cal. **Retail \$9.95** SPECIAL \$6.90

ARMS CORP. ENTENNIAL

3318 W. Devon Ave., Lincolnwood, Ill. 60645 F. F. L. No. 36-2716





Mfd. by NOSLER BULLETS, INC.

An affiliate of: LEUPOLD & STEVENS, INC. Dept. GN-471 P.O. Box 688 Beaverton, Oregon 97005, U.S.A. What else is there to gripe about? Oh, yes, REA Express. Again.

Some few months back I commented in this column on the prohibitive cost of shipping firearms by REA Express these days. Where a few years ago one could ship a handgun almost anywhere in the country for no more than three or four dollars, REA now charges \$10 to \$15 for the same service. It seems more than mere coincidence that the rate increases went into effect about the same time as GCA 68. The story I get now is that REA must charge the maximum rate because of the cost and inconvenience of properly keeping track of firearms shipments. My answer to that is simple; I just don't ship guns REA anymore unless there is absolutely no other way to get them to their destination-and even then it hurts. Now, though, REA Express has launched a promotion program which involves the leaving of a Lone Ranger type "Silver Bullet" (in reality a nickeled dummy cartridge made by Remington) with its customers. Such unmitigated gall in promoting REA through the shooting sports, after having slapped us in the face insofar as shipping our guns is concerned, is phenomenal.

Many law enforcement agencies are a bit miffed at being forced to pay a half-dollar or more each for 12-gauge grenade-launching blanks. Since they are limited-production, specialized items, it appears the price is set at whatever the traffic will bear. In reality, such blanks are far cheaper to produce than conventional shotshells. They normally consist of a cheap paper case, a primer, a small charge of black powder, and a couple card wads—nothing more. About a nickle's worth of components.

Good fired plastic or paper cases can be reloaded to produce the same results for about 3 to 4 cents per round. Commercial loads differ a bit, but those I've broken down contained 40 grains of black powder (roughly FG granulation) and two .125" cardwads seated solidly over the powder. Easily duplicated on most shotshell loading tools, though special attention must be paid to the crimp. It is completely unsupported from beneath, Before doing this, though, dissect a

loaded round and duplicate it exactly. Don't try to substitute black for smokeless or vice versa, and don't change the black powder granulation. There are no smokeless powders that you can buy which are suitable for this use, so don't try to use something because you think it might work. It won't, at least not safely. Stick to black and you can duplicate most police grenade-launching blanks without difficulty. Handloads at 1/10 the cost of factory blanks can enable less-affluent departments to do a lot more training on a slim budget. Regardless of what you've been told, it takes a lot of practice to lob a gas or smoke grenade through a door or window from the average 12-bore riot gun.

In these days of sophistication, we often tend to forget some of the tools and methods used in the past. Many handloaders have the idea that unless they have a chronograph they can't determine bullet velocity or can't duplicate a factory load.

Of course a chronograph is desirable and it does allow precise velocity measurement. All the same you can duplicate any rifle load without one. Simply first zero the rifle precisely at 100 yards with the original load. Then carefully calculate and locate the center of the group. Shoot a careful group then at 200 yards or more, locate its center, and measure the drop from point of aim. The rest is simple; work up your load until, when zeroed at 100 yards, it duplicates the 200 and/or 300 yard drop of the factory load. Of course, it goes without saying that the bullets used must be of the same type, weight, and shape. You may never know precisely how much velocity a load so developed is producing, but you'll know it matches the factory round.

I recently ran into a fellow who had a large supply of military 7.62mm/.308 cases he wished to load. Unfortunately, their primer pockets were a hair large and wouldn't hold his primers tightly. He solved the problem by making a hollow punch to encircle the pocket. A sharp hammer-rap on the punch upset the mouth of the pockets inward enough to hold primers tightly. Imagination, that's all it takes.

John Ek
"Fighting Knife"



LIFETIME GUARANTEE — 100% HANDMADE; COMPLETE WITH LEATHER SHEATH Send \$1 for 1944-66 handbook "Your Silent Partner."

DEALERS WRITE:

John Ek Commando Knives Dept. SI, 3214 NW 54th St., Miami, Florida 33142



achtung!

MACHINED METAL FULL-SIZE MODELS OF WEAPONS USED BY THE WEHRMACHT AND CRACK WAFFEN SS TROOPS, FUNCTION, FEEL, HANDLE, WEIGH-EVEN DISASSEMBLE LIKE ORIGINAL GUNS-YET ARE TOTALLY SAFE.

Replica models are built for discriminating collectors who demand authenticity and realism. The product of years of design and study, these replicas are precision-made to be like the originals. Yet, they are absolutely safe and incapable of chambering or firing live ammunition. From the 1896 Military Mauser used the world over to the Schmeisser sub-machine gun of World War II fame, here are almost perfect duplicates of the guns used by the German Army. Military hobbyists everywhere appreciate this inexpensive and safe way to collect and display famed weapons.



they even fool experts-yet cannot be fired U.S. GOVERNMENT .45, standard before WW-I, #300...... \$17

CIVIL WAR 36 NAVY COLT. tayored sidearm of Union and Con-federate forces, =400.....\$21

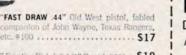
Cott with engraved cylinder =401 \$25 ITALIAN 1934 AUTOMATIC. World War II, #302 \$17

DISASSEMBLE LIKE **ORIGINAL GUNS**

ADDITIONAL MODELS

German PPK "James Bond" Compact Automatic, \$205	\$15
Police Positive Special Revolver, \$105	
,357 Magnum Type Snub Revolver, #106	
Double Derringer "hideaway" arm of the West, #305.	\$13
Nickel Plated Derringer #305A	\$15





"Dodge City" Frontier Pistol, 5-1/2" Barrel, #101. \$19
"Horse Soldier" Cavatry .44, 7" Barrel, #102 . . . \$19
"Wyatt Earp" Buntline Special, 12" Barrel, #103 . . \$19

MORE MODEL GUNS	
Western '73 Carbine with octagonal barrel, #501 Western '66 Golden Boy Carbine, #505,	\$48 \$48
(add 53 ca. for postage on Carbines) .357 Magnum Combet Revolver, ±107	\$21

REPLICA MODELS. Inc.

Dept. GM-4 610 Franklin Street Alexandria, Virginia 22314

NAME ADDRESS CITY____STATE___ZIP____

Send check or money order-include \$1.00 postage for each model ordered.

Sale prohibited in N.Y. City

	-		1
DI-			42.4
Plea	ase	order	Dy
mo	del	numb	pr

MODEL	PRICE		
	\$		
	\$		
	\$		
	\$		
POSTAGE	\$		
TOTAL ENCL.	\$		

MONEY BACK GUARANTEE IF RETURNED IN 8 DAYS

☐ 25¢ enclosed for full color catalogue



THE REVOLVER vs. automatic hassle has roared on unabated ever since the first self-loader rolled off the line in the early 1890's, and will doubtless be with us at least until the laser gun obsoletes both types. This then is written less in the expectation that it will stand as the final word on the question than in the certain knowledge that the topic is eternally good copy.

Over the past half century opinion has congealed along fairly clear lines. Military forces, world wide, have adopted the semi-auto without exception. The Europeans cast the revolver aside with no lost motion whatever as soon as functional automatics became available: the Latins weren't long behind them. Our own army got the word surprisingly early on, and adopted the .45 Government Model in 1911; it was exactly what they wanted and they've yet to be pried off it. As early as 1907 they were of the stated opinion that one of the few advantages of the revolver was that many recruits had preinduction experience with it, whereas few Americans in that primitive era had seen a self-loader. That, declared the military, would shortly change.

The English, on the other hand, hung onto the wheelgun till the grim end, and finally, grudgingly, gave it up in the 1950's mostly to standardize ammo with the submachine gun.

Except for American and Canadian police, and U.S. AID-dependent forces, law enforcement agencies the world over favor the semi auto without exception. Just after the 2nd war, we did the German polizei a big good deed by arming them with Smith & Wesson revolvers. As soon as we turned our backs they cast off these fine sidearms with vast relief in favor of clearly inferior Spanish and French automatics.

On our side of the water the self

loader would have gotten just as short shrift. Police combat competition in the U.S. flatly prohibits semiauto pistols; the most widely used training text, "Combat Shooting For Police" by Deputy Chief Inspector Paul Weston of the New York City Police, doesn't even concede the existance of semi-automatic pistols; and the FBI gives the self-loader the bum's rush.

That's where it stood in the early



New look of equipment for the modern, forward thinking department.

1960's. None of the basic facts have changed, but you can feel the vibrations all over. At this tardy date, the semi-auto is finally getting hold. The Illinois State Police and the Covina (Calif.) Police have both junked the revolver in favor of the 9mm Smith & Wesson Model 39 automatic. A number of departments in California and Texas have adopted the .45 Government Model, Still others, while still issuing the revolver, permit proficient officers to carry a semi-auto. Widely publicised free-style combat competition in Southern California has proven, in the minds of many, the absolute superiority of the largebore self-loader as a practical sidearm. At last American police are beginning to glimpse the light.

Meanwhile, in Europe, things are

coming unglued all around. The French police have some new Smith & Wesson M&P's in service, and would re-equip across the board with revolvers by next weekend if they had the funds. Siegfried Hübner, a German combat pistol authority, created a small uproar last year when he wrote an article defending the automatic. His was felt to be an underdog opinion. Revolvers, in Europe, are the nouvelle vague.

In the face of such rampant confusion, it seems a propitious moment to get my opinions on record.

As to which is better, wheelgun or self loader, it depends largely on what you use the handgun for. For plinking, backpacking, or small game hunting, it doesn't make a large particle of difference. A .22 rimfire is wanted, and either type will do fine, although the revolver is somewhat to be preferred since it's safer to bash about and some offer easy conversion to .22 Magnum with interchangeable cylinders.

For the handgun hunter in quest of deer, bear, and such, the cylinder gun is the only choice. It's easier to scope mount, but the main thing is power. You've got to have it, and only .41 and .44 Magnum revolvers offer it. The reportedly forthcoming .44 Auto Mag from Sanford Arms may change all that, but it's not here yet and the wheelguns are.

For formal target shooting, the revolver is dead. Use one if you like, but ISU Centerfire is the only match that can still be won with a cylinder gun, and it's not fired in the U.S.

It's when we consider the handgun as a defensive weapon that controversy arises. The pros and cons have been tabulated and discussed in every text (except "Combat Shooting For Police") from the 1929 "British Textbook Of Small Arms" to the present. I see no need to reiterate them, for the logic on both sides is largely rubbish. Some though are too rich to pass unnoticed.

The automatic flings its brass inevitably in high grass. The revolver saves it. This is a valid point if you regard the gun primarily as an adjunct to your reloading hobby. If you're more interested in its defensive potential, then what happens to the hulls is quite beside the point.

The automatic leaves its brass behind as evidence. General Hatcher made this pregnant observation, the only purpose of which could have been to recommend revolvers to criminals thereby hamstringing the police.

The automatic ejects its brass, thus disclosing the firer's position. I'm just as content to have forgotten who

(Continued on page 15)

Wear this emblem with pride

Sportsmen everywhere

will recognize this famous emblem when you wear it on your hunting or sporting jacket. Over one-million sportsmen are members of the National Rifle Association of America. So wherever you go in the great sports of shooting and hunting, this emblem provides instant recognition among the fraternity of gunowner-sportsmen.

Year Around Programs

Every month of the year, NRA members have opportunities to enjoy the shooting sports — from Sighting-in days before hunting seasons to national, state and local matches. There are also marksmanship training, hunter safety programs and instructor certification.

Hunting Service

NRA Hunting Bulletins and publications tell you about game availability, shooting preserves, as well as gun and game laws. You will learn about when and where to hunt, best equipment to use. Hunter Awards are issued for many types of large and small game.

Firearms Information Service

Experts on NRA's staff give you prompt, practical answers to your questions on firearms. This is a valuable service both for gun collectors and for those interested in gun alterations, making their own grips and stocks, reloading and engraving of shooting pieces.

Legislative Information Service

As an NRA member, you are kept informed on proposed firearms legislation, which would place unreasonable restrictions on the legitimate use of firearms.

Non-profit Organization

NRA is a non-profit organization, supported entirely by members' dues. Chartered in 1871, NRA celebrates its 100th Anniversary this year.

Enjoy these services

Your NRA membership includes a subscription to the AMERICAN RIFLEMAN magazine—twelve big issues of the most authoritative publication on shooting and hunting. You will want to read and save every copy. Articles cover current shooting events, hunting, firearms history, gun collecting, amateur gunsmithing and many how-to-do it projects.

Your membership also makes you eligible for -

- · Low cost gun and personal accident insurance
- Opportunity to qualify as an NRA Certified Rifle, Pistol, Shotgun, Home Firearm or Hunter Safety Instructor
- Free home range plans and other useful printed materials on specialized firearms subjects
- Introductions to NRA Affiliated Clubs
- Use of NRA's Book Service for special manuals and hard to find books
- PLUS many other services to make your membership well worth the small dues cost. You are invited to join the NRA now.

Use this application to join NRA today

FREE — colorful, embroidered NRA brassard will be sent to you



National Rifle Association of America

1600 Rhode Island Avenue Northwest Washington, D.C. 20036

National Rifle Association of Ame	rica	
1600, Rhode Island Ave., N.W., Washington,	D.C.	20036

Enroll me as an NRA member and begin sending The AMERICAN RIFLEMAN magazine. Also send me the FREE embroidered brassard.



\$7.50 dues enclosed	☐ Bill me	1031D-D
Name		Age
Address		
City	State	71P

Confirming application and details will be sent.

ARVE MORE GUN SAVVY
THAN EVER

THAN EVER

this NINTH REVISED EDITION of
W. H. R. Smith's timpless firest W. H. B. Smith's timeless firearms classic -2000 pictures and 228,000 wordsis your handy reference about

the guns of 42 countries

SMALL ARMS The WORLD keeps pace with the rapid firearms developments everywhere and brings together

all you need to easily know the world's armament...identifying characteristics, operation, parts, methods of disassembly and assembly, calibers, ammunition, loading specifications, safety factors, evaluation, construction, design. Through its unique country-by-country arrangement you see quickly all there is about current uses and recent changes in military sidearms, carbines, rifles, automatic rifles, submachine guns, and machine guns. For the first time you'll find a brand new section dealing with guns made especially for sportsmen...technical and operating detail about the major bolt action, lever action, pump action, semi-automatic, single shot, and combination rifles: pump and semi-automatic shotguns; revolvers; semi-automatic and other pistols.

And, for ordering this new edition now you may choose any one of four bonus books...books that offer at-home craftsmen ways to care for and improve your guns. See more about them below.

This new edition of Small Arms of the World ably reflects global developments and important historical data for unmatched encyclopedic detail. Here, the gun enthusiast finds an extensive rundown on the origins and evolution of gunpowder and firearms, single-shot and metallic cartridge arms and lock systems, single-shot European rifles, the U. S. and foreign military bolt action, the development of automatic and semi-automatic weapons, the history of military handguns, and tables on small arms ammunition makeup.

Get your international gun library—and a free book worth up to \$10-by sending now for the Ninth Revised Edition of Small Arms of the World...it continues a three-decade reputation as the exhaustive, authoritative, and standard reference for all who want precise, world-wide, technical gun data.

Some of what's new includes Belgian, Swiss, and Italian .223 caliber assault rifles; submachine guns from Austria; Argentina, Japan, U.S.; French, Chinese, Japanese, and Polish pistols: Soviet machine guns and new data about Czech and U.S. models; a complete new chapter on Egypt; latest and importantly modified rifles of U.S., Poland. China, France, Yugoslavia; sporting arms from

nine major countries.

take one of these FREE when you send for the SMALL ARMS

INTRODUCTION TO MODERN
GUNSMITHING by Harold E.
MacFarland A master gunsmith
presents an experience-packed
guide to the world of gun fixing.
It's a straightforward, moneysaving addition to any workbench.
From choosing the right tools to
licking disassembly problems,
anyone who wants to tinker will
be able to, problem-free. 320
pages. Illustrated. \$6.95

CHECKERING AND CARV-ING OF GUNSTOCKS by Monty Kennedy and 17 others. Details English, French, American checker-ing carving of ame animals. French, American checker-ing carving of game animals, birds, flowers, leaves, seeds 336 pages, 400 illustrations, Large format, Pattern sheets, \$10.00

GUNSTOCK FINISHING AND CARE by A. Donald Newell. The most complete, technical treatment of the many ways to protect, ment of the many ways to protect, and protected for retinish gunstocks. ment of the many ways to protect, decorate, or refinish gunstocks with chemical coatings. Tells about woods, preliminary operations, stains, drying oils, varnishes, lacquers, shellac, plastic, waxes, 506 pages.

RESTOCKING A RIFLE by Alvin
Linden Work-principles for stockmaking, converting, altering
Details modifications to the 1903
Springfield, alterations to the Winchester Model 70, converting the
1917 Enfield. Six full-size pattern
sheets. Large format. \$9.95

768 pages 8-1/2 x 11 2000 illustrations \$17.95

a Stackpole Book

reviewers rave...

ALL ARIE

expanded, updated, illustrated encycloped

"Small Arms of the World is the sort of book that every shooter should own and read - the content, the presentation of the material, and the whole appearance of the book will make that reading and studying a lot easier. The biggest single source of firearms info." -Shooting Times

"In the 'must' category for the serious arms design student. Probably the finest ever written in this field." - Gun World

"I highly recommend this book. It's a classic and I wouldn't be without it."-Ian Stevenson in Law and Order

"A valuable reference book for all ...the finest small arms book of Its type." - American Rifleman

"Highly recommended...the most complete work ever written." -Guns Magazine

	Skokie, Illinois 60076
•	OK. Let me seecopies of the new ninth edition of SMALL ARMS OF THE WORLD at \$17.95 each. My check or money order is enclosed. I understand that if I'm not completely satisfied I may return the book within 10 days for a full refund.

Guns Magazine Book Department GS-4

8150 N. Central Park Avenue

\$,	payment in full enclosed.
now, send me my FRE	SMALL ARMS OF THE WORLD
with each copy of SM	ALL ARMS

Send all to

made this supremely inane statement.

The automatic is smaller and lighter than revolvers of equivalent power. Smaller perhaps, but that doesn't necessarily mean lighter. Compare the 39 oz. Government Model with the 35 oz. Combat Magnum, or even with the 36½ oz. 1950 .45 Army revolver. The auto competes weightwise only when it goes to an aluminum frame, in which case you might not want to subject it to constant heavy firing. Compare the 21 oz. PPK to the 19 oz. Chief's Special, both in steel frame.

The automatic "can not be fired from the hip as it throws cartridges



Anytime sustained firepower may be a factor, the choice is obvious.

into the shooter's face." General Hatcher again, beyond all need of comment.

"The automatic can not use blanks . . ." This is Hatcher once more. He's wrong, but who cares?

"The automatic points more naturally than the revolver." "The automatic cannot be pointed naturally." Obviously two different experts prattling at cross purposes.

The revolver will function with dented, mildewed, and underpowered ammunition whereas the automatic will not. What sane man carries loads like this in his business gun? This consideration is of interest primarily to someone planning an extended stint on the upper Amazon, in which case the automatic's easy detail stripping for cleaning and parts replacement may override the revolver's tolerance of unpredictable ammunition quality.

Enough of this foolishness, Bill Jordan, in his remarkable book, "No Second Place Winner" (which I warmly recommend to everyone) makes a subtle case against the .45

Auto as a police gun, which I feel is grossly deceptive and off beam on almost every point.

Mr. Jordan's contentions, as I interpret them, are:

- 1) He grants that for sustained firepower the revolver cannot compare. Six shots and the wheelgun has to be trucked to the sidelines for recharging. The auto, "against a massed banzai attack . . . would be hard to beat . . .", but he sees no need for more than six shots in police work, a distinctly odd notion in view of some of the anecdotes he and other Border Patrol veterans relate.
- 2) To be fast on the first shot the auto has to be carried cocked and locked. Jordan admits that his objection to this is more emotional than logical, and I can certainly accept and respect that,
- 3) The grip safety is apt not to be depressed in hasty circumstances, hence must be permanently blocked down, in which case the gun is unsafe. A mechanical examination of the 1911 shows otherwise. The grip



Grip safety on .45 blocks only the trigger bar, not the hammer or sear.

safety blocks neither the hammer nor the sear, but merely keeps the trigger from being depressed. Most holsters shroud the trigger, but even if they didn't, the grip safety in my view is utterly non-functional. It will not, for instance, prevent the gun from going off if dropped. The thumb safety is the one that works, and blocking the grip safety down entails no sacrifice of safety, per se, that I can see.

4) Round nose, full jacketed bullets are not efficient manstoppers. In order to "qualify for police use" ammunition would have to be handloaded with "lead wadcutter" bullets, and each and every weapon would have to be custom gunsmithed to feed them reliably. Such bullets, Jordan notes, rarely feed with total reliability no matter what is done to the gun. This all is absolute smokescreen.

.45 hardball ammunition—230 grain round nose full jacketed bullet at 850 fps—has for the past 60 years proven

(Continued on page 17)

Learn to Reload!

SAVE 60% ON AMMO!

SPECIAL COMBINATION
OFFER at your gun dealers —
or mail this coupon!



New Revised RCBS Reloading Guide Plus Free Catalog

Both for only \$100

RCBS RELOADING GUIDE:

Shows step by step with photos, drawings, and easy-to-follow instructions how to save 60% and more on ammo costs by reloading those fired brass rifle and pistol cartridge cases you are now throwing away! Lists reloaders language, tools you will need to get started reloading, and beginner's table of powder loads. Explains how smokeless gun powder is classified as a propellant — not an explosive—and how it is safer than gasoline or lighter fluid. Includes scores of articles on Reloading For Hunting, Selecting The Right Bullet, What is The Right Powder, Test Firing Your Reloads, and countless other information. Includes articles by famous gun and hunting authors and instructions by renowned reloading authorities.

FREE RCBS CATALOG: Loaded with photos and drawings. Shows complete line of famous RCBS Precisioneered® reloading tools and prices; lists reloading dies for over 200 calibers, reference tables, and a heap of other interesting information. Most informative and most descriptive reloading catalog available anywhere.



RCBS, INC. DEPT. 0-00 P. O. BOX 1919, OROVILLE CALIFORNIA 95965



MAIL THIS COUPON

SPECIAL 2-FOR-1 OFFER

RCBS. INC.
DEPT E-4, P.O. BOX 1919,
OROVILLE, CALIFORNIA 95965

Please rush to me your NEW, revised RCBS Reloading Guide Plus a FREE RCBS Catalog. Both for only \$1

Enclosed is
One Dollar Bill
Check
Money Order

RCBS, Precisionewred, and The Rock Chuck symbol are registered trade marks of RC

NAME

ADDRESS.

C'TY

ZIP

OUR MAN IN

WASHINGTON







By CARL WOLFF

When the 1968 Gun Control Act was enacted, it made it unlawful for a shooter to buy ammunition without listing name, age and residence. Another provision required all dealers to maintain such records of sale or disposition. Included was all ammunition and components, but Public Law 91-128 removed sporting type ammunition for shotguns and rifles, along with component parts for such ammunition.

The original version of P.L. 91-128 would have removed .22 caliber as well as rifle and shotgun ammunition, but Senator Edward Kennedy blocked passage of the measure until it was agreed to remove .22 caliber ammunition from its provisions.

It was charged by the anti-gun forces that no law was needed, that the Treasury, through a change in regulations could revoke the record keeping requirements. True, but the pro-gun lawmakers know well that a change in the administrative branch could reinstate the regulations. The Departments of Justice and Treasury favored the new measure. The reason given by the Justice Dept. was stated in a letter, as follows: "There is not a single known instance, as we have learned from our discussions with the IRS, not a single known instance where any of this record keeping has led to a successful investigation and prosecution of a crime." A representative of the Treasury Dept. agreed.

Congressman Abner Mikva made the most

outlandish statement of all about the bill. "If we pass this bill, we will prove to the country that the gun lobby is more powerful than the citizen groups of the country. The conscience of the country cries out not to weaken this law, but to strengthen it; not to find additional ways to use the gun, but to act to save the lives of the people of this country."

Rising to the occasion was Congress—man Bob Casey of Texas. "It has been apparent how ridiculous some provisions of the 1968 Act have been. One example was brought to my attention by one of my constituents who was home on leave while serving in the U.S. Army."

He read into the record a letter detailing the difficulty a twenty-year-old had buying ammunition for hunting. The writer further pointed out that he helped operate Nike-Hercules missles, but could not buy .22 caliber ammunition. The Congressman ended his reply by informing the House that the writer was no longer one of his constituents; he died while in the service of his country.

"His statement," said Mr. Casey, "reflects the thinking of the vast majority of the young men serving in our armed services who feel that although they are entrusted with all types of firearms while in the service, they are denied the right to purchase firearms or ammunition for peaceful, law abiding purposes while home on leave."

itself an extremely capable manstopper. According to the only data I'm aware of, it is effective in about 19 cases out of 20. Compare this 95% effectiveness to the 50% effectiveness of the .38 Special which Jordan claims "fulfills the minimum requirements" of police service. There's no need to cobble around on either the pistol or its ammunition.

5) Assuming that this needless alteration of the automatic to feed wadcutter or semiwadcutter bullets would be necessary, and would result in making the gun a "custom item," Jordan condemns it for police use, and proceeds, without a scintilla of logical embarrassment, on the same page in fact, to recommend the following alterations to the service revolver: shortening the trigger return spring, polishing the action with crocus cloth, cutting off the hammer spur, grinding the front of the trigger guard thinner, rounding off the cor-

ners of the rear sight, and, a few chapters back, replacing the grips.

6) Finally he resuscitates the old canard that the automatic "is not a good natural pointer." There's an element of truth in this. A revolver man will inevitably point low with a .45. So will a .45 man point high with a revolver. My own feeling is that the revolver is more of a "natural" pointer, but a bit of practice soon sets the wrist for the 1911's grip angle. Curiously, the revolver grips which Mr. Jordan designed and recommends tend to cause the gun to point lower than it otherwise would—rather like an automatic.

And at this point may I respectfully say, "Pardon me, Mr. Jordan," with assurance that in due time I'll enumerate my own ideas on the subject for others to pick apart as they will.

Tune in again next month.



Braverman Directs Firearms Course

A course in the development and use of firearms will be offered by Columbia-Greene Community College during the Spring semester. The course is called "Fundamentals of Firearms" and is designed for those who vocation or avocation involves firearms—law enforcement and conservation agencies have been invited to send participants and the course is open to others who are interested in guns and ammunition.

Topics to be covered include a general history and development of different types of firearms, firearms freaks and oddities, accessories, ammunition and propellants, power actuated tools, economic impact of firearms, ballistics, firearms laws, safety, competitive shooting, combat training and trick and exhibition shooting.

The course, which includes lecture, laboratory and demonstration sessions will be under the direction of Shelley Braverman, a member of the Guns Magazine staff. This should prove to be one of the most interesting and informative college courses to be offered in many years and attendance should be quite high. The college is located in Athens, New York.

FLINTLOCK PISTOLS

by F. Wilkinson

The Secretary of the British Arms and Armour Society—with commissioned photos from the U.S., England, France, Germany, Italy, Scotland, Spain—describes the changes in styles and decorations over the three centuries of the flintlock's use by soldiers, pioneers, householders, and highwaymen the world over. Includes single, double, triple barrels; spring bayonets . . . diagrams of lock mechanisms and other details.



665

Book Department, GUNS Magazine 8150 N. Central Park Ave. Skokie, III, 60076	\$4.95	6	
Send my copy of FLINTLOCK PISTOLS right away. Check or money order enclosed for \$4.95		- 14	GB-4
NAME			
ADDRESS			
CHEN		min	



BUY DIRECT AND SAVE



WORLD'S LARGEST SPORTS CATALOG

SINCE 1893 THE CHOICE OF SPORTSMEN THE WORLD OVER

- Contains 625 pages, 10,000 items, thousands not available elsewhere. Camping, Hunting, Reloading, Clothing, Fishing, Food and Archery supplies, Snowmobiles, Mini-Bikes.
- Low direct factory prices.
 Send \$1.00 today and save. \$1.00 refunded on first order of \$10.00.
 Address Dept. 4L2

HERTER'S INC. SINCE WASECA, MINN. 56093



FAMOUS CURRIER AND IVES SHOOTING PRINTS

FOUR for \$2. A limited edition of the rare 1875 Currier and Ives humorous shooting prints. Reproduced in full color on fine paper, ready for framing 15" x 19", including border. Only \$2.00 for a set of four. Originals cost \$50 or more each.

These famous caricatures depict the international rifle matches held in 1875. Titles: Erin Go Bragh!, E Pluribus Unum!, The Highland Fling!, The Queen's Own!

Order now. Supply is limited. Send cash, check or money order.

Remington Sportsmen's Prints P. O. Box 731, Dept. 528 Bridgeport, Conn. 06601

Please send () sets of four Currier and lves prints. I enclose \$2.00 for each set. Name

Street or Box No		
City	State	Zip

POINT BLANK

By COL. CHARLES ASKINS

WINCHESTER technicians, in an attempt to establish the accuracy life of a .243 barrel, fired it once every 10 seconds. After 1100 shots it was gone. They found after 30 rounds, fired at a rate of one shot every 10 seconds that the barrel would give off steam when immersed in a tank of water. When the rate of fire was reduced to a shot every 30 seconds, and the bolt left open between firings, then the damage to the barrel was immeasurably less.

During heavy testing the engineers found there was a drop-off in .243 barrel life at about 1600 rounds. In normal firing, presumably with a period of time for the tube to cool, accuracy was good to 3000 shots and might even go as high as 5000 rounds. It was also discovered that the .22-250 and the .225 were very comparable to the .243 in the business of barrel life.

In commenting on their testing they have written: "Gases can literally burn away barrel steel just in front of the chamber throat. The metal grows rough, eroded, and develops tiny surface cracks that resemble sundried gumbo mud. When a rifle bore is badly eroded in the critical first inch ahead of the chamber, the bullet must jump across that inch before it engages the rifling and begins to spin. It smashes into the rifling with great force while still gathering speed, and accuracy suffers even though the rest of the rifle bore is in good condition. Barrel erosion increases with temperatures and pressure. The incandescent powder gases have relatively little effect on cold barrel steel. But in rapid fire, as barrel heat rises, so does barrel erosion.

One time a test was made of a .30-06 Springfield barrel which was brand new and unfired. It was shot 1500 times with GI issue ammo. At the conclusion of the shooting the tube was split down the middle and looked at under a 25X glass. The erosive effects of the powder gases had left their mark in the front end of the chamber. It was blackened in typical fashion. In the steel below the blackened area was a pattern of erosion which is referred to as the "alligator checks" of deterioration. These are referred to as "alligator" because of the similarity to the overlapping plates on the back of that reptile. In the '06 barrel, the checks ran circumferentially about the chamber and were too shallow to be measured.

In the leade of the barrel, that critical portion of the tube which runs from the forward end of the chamber into the rifling itself, was other evidence of the harm done by the 6,000degree gases. This pattern took the form of "lizard design," somewhat different in appearance than the checks found in the forward end of the chamber. The leade must bear the full force of the driving gases, taking punishment not only from the high temperatures, but also from being sandblasted from the effect of burning and only partly consumed powder grains. It is through the leade that the propellant gases are at peak ranges.

In the barrel itself there was the customary blackening which is an infallible indication of erosion. Both lands and grooves appeared to be uniformly darkened but an examination under the 25X glass showed there were differences in the erosive forces. The driving edge of the lands had taken the full force of the bullet and this edge was slightly cleaner than the trailing edge.

An interesting part of this study was the different sort of harm which occurred to the barrel. It bore one evidence in the chamber, a slightly different erosive effect in the leade, and still a third in the barrel itself. At 10 inches from the chamber there were evidences of slight metal fouling from the gilding metal jacket or the bullets. The barrel itself showed a series of cracks. These took a longitudinal direction and extended not only through the bottoms of the grooves but across the lands as well. These cracks were not more than 1/10" in length and were too shallow to be measured. This checked area extended approximately 12 inches up the bore.

The 1500 cartridges were all loaded with the 172 grain boat-tail bullet. This is a slug notorious for permitting gas-cutting. When this happens, the gases seep around the tapered heel and find a sort of funnel between the slope-tailed projectile and the cartridge case and is canalized in the direction where it will do the most harm. Undoubtedly a part of the evidence of erosion in the tube was caused by gas-cutting. It's action is precisely the same as that of the gases coming along behind.

A barrel, when it first shows signs of erosion, will, most likely, keep on shooting well. However, if it is continued in use the time will come when bullets out of the barrel will show unmistakable signs of skidding. The slug has been driven out of the chamber, through the leade, and into the barrel proper. Here, instead of commencing to spin, it skids across the top of the washed out lands for a distance before the lands can grip it and compel a rotation. When a tube is this far gone, then it's accuracy is pretty sketchy.

There is needed, somewhere in the USA, a laboratory that is devoted to testing guns, cartridges, stocks, triggers, barrels, sights, cleaners, and the whole vast miscellany of gear that is part & parcel of the shooting picture. "Good Housekeeping" magazine has such a lab and in it they put all the kitchen and household articles over the jumps that are in common usage by the Little Mother. The magazine, after it has given the item an exhaus-

ASKINS BAGS RECORD ELK



Askins' elk had one horn 57 inches long, the other went 54½". Around the base it was 12 inches, 6 points on a side and a Boone & Crockett score of 350.

tive wring-out will put its seal of approval on the article. That is if it measures up! Presumably if it does not it is returned to the manufacturer with pertinent suggestions on how to make it better. The shooters need the same kind of a field testing station.

Good Housekeeping does not pick out its test items haphazardly. The maker approaches the laboratory and asks that it's product be given the business. What the manufacturer is seeking is that seal of approval which is a potent sales force when the advertising campaign is cranked up. There isn't any reason why if a similar lab was commenced by some reputable outfit it could not function the same way with our guns and loads.

There is another magazine that performs very much the same service as does Good Housekeeping. This is the "Consumer's Digest", a publication which does not necessarily work with the manufacturer. The Digest also maintains a test lab but it goes out on the open market and buys the test goods. After that it gives the equipment the wring-out. This is apt to be pretty rough and when the report is submitted for publication it may be anything but complimentary. Sometimes Consumer's Digest gets sued for its test reports but the publication weathers these storms and has attracted a big readership because people feel that what the book says is fearless and honest.

The shooting sport could very profitably use a laboratory modeled somewhat after that of Good Housekeeping and Consumer's Digest. It is not that the average shooting man has many doubts about domestic-made guns and loads but frequently he is confronted with foreign imports of not only gun and cartridges but an array of other items like scopes, binoculars, scope mounts, collimators and like gear which needs honest evaluation. It would not only be of inestimable value to the American buyer but would also help the importer sell his foreign-made product if it had the seal of approval of an established field laboratory.

The H. P. White Co. of Bel Air, Maryland do some work of this nature. However, the company only functions when it is approached by an individual or a company who has specific tests to perform. These may take the direction of pressure, velocity or accuracy checks. After the H. P. White Co. finishes, it provides the necessary data but this is never made public. The firm does not make any attempt to wring out either guns or loads simply for the information of the general public. Nor yet to put it's

(Continued on page 74)

EDWARDS RECOIL REDUCER®

Money Back Guarantee When Installed As Shown And Adjusted In Any Shotgun Or Rifle Including Magnums



SEE YOUR DEALER OR ORDER DIRECT

This Reducer is the Only Firearm Recoil Reducer covered by Two Patents granted by the U.S. Patent Office.

Quality, Facts, and Reputation has increased for Five Seasons.

Honesty backed by Facts is and always will be the Winner, and you can be a Winner in the long run.

SAVE YOUR MONEY AND SKIN.
BUY REGISTERED PRODUCTS COVERED
BY THE LAW.

Send Stock and Breach Only, Installed and Mailed Back Same Day
TOTAL PRICE INSTALLED—\$25,00 Plus Shipping and Insurance cost \$2.5
INSTALL YOURSELF ALL PRINTS AND INSTRUCTIONS FURNISHED
Standard—4" or 4½" For Any Gun \$18,00
SLEEVED—Made to order for Brownings with OVAL CAVITY,
Give Depth of Cavity at top, \$22.00.

INVENTED AND MANUFACTURED BY JESSE EDWARDS

269 Herbert Street • Alton, Illinois 62002 Days - 618 462-3257 or 462-2897 - Nights

SEMI-INLETTED STOCKS CUSTOM MADE RIFLES—MILITARY CONVERSIONS



Franchised Poly-Choke & Rib

PICK UP YOUR FREE CATALOG AT YOUR DEALER OR SEND 254 FOR MAILING TO CREST CARVING CO.

8091 Bolsa Avenue

Midway City, Calif. 92665

We've got your '71 Weaver-Scope catalog.

Now we need r name.

information or	Weaver-Scopes,	Weaver-
)	roducts like C	beautiful 40-page Weaver-Scope roducts like Qwik-Point and the information on Weaver-Scopes,

		Е	E	л	3	А	N	-1	
			33			21/			

ADDRESS

STATE

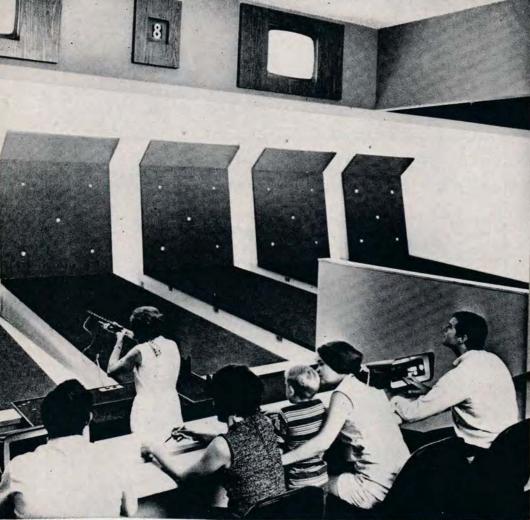
ZIP

W. R. Weaver Company

Dept. 43

El Paso, Texas 79915





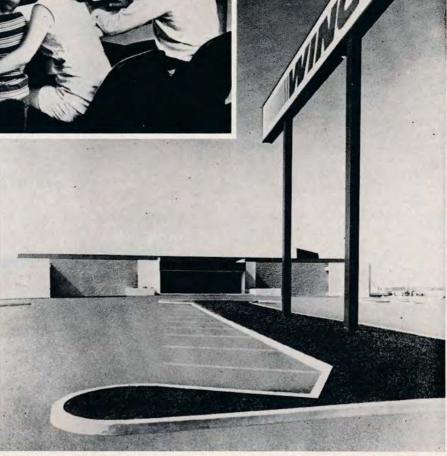
By JAMES D. MASON

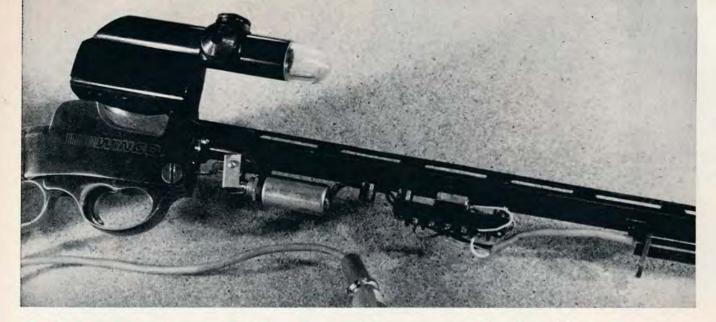


This is the Wingo shooting field. There are 18 shooting fields in the center, each equipped with a closed circuit TV scoring system. While a shooter waits for the target, his teammates and opponents at the rear plan strategy for upcoming shots.

Upper right: This is the instant of contact when the pellets smash the hollow ice ball target to pieces.

Right: Wingo Center in San Diego, California. Two-million dollars has been invested in the prototype facility that has 30,000 square feet of space including lounges, snack bar, cafes, and 18 shooting fields. Ample parking, air conditioning and many other factors are sure to make Wingo a hit with amateur shooters and the experts alike. Great fun!

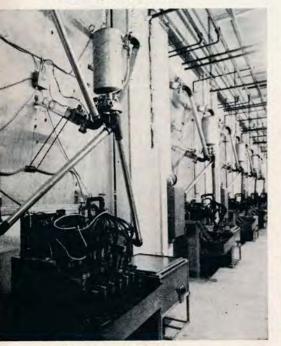




The Wingo gun is an integral part of the system, not just an accessory. The wire unbilical cable connects to the electrical control console that arms the rifle via the solenoid switch. The safety is automatically set again after the rifle is fired. Notice the special Weaver optical sight used for Wingo and wide ramp. A modified version of the Webley & Scott Martini single shot action is used. Weight is 5 pounds, 7 ounces.

ON THE FACE of it, the idea of firing birdshot at airborne ice balls may not overly stimulate you. But if you have the opportunity to play the new sport of Wingo, this challenge will be irresistible.

The press of urbanization has slowly pushed shooting activities farther from population centers. But, with the advent of the first Wingo Shooting Center, the prospects for inner-urban shooting are renewed. Establishing a new mass-participation shooting sport is a demanding objective. But the first step toward a goal of a nationwide acceptance of Wingo has been taken in San Diego, California.



GUNS . APRIL 1971

Wingo, an operation of the Winchester Group, Olin Corporation, has spent four years in research and over two million dollars toward the successful development of this new shooting sport. William D. Chase, Director of Wingo Operations indicated that further expansion on the West Coast would occur before new centers are opened across the country. Chase organized and put the program and Wingo staff together.

What is very important to shooters is the potential support for all shooting sports that will ultimately come from this program. An estimated 400 urban sites in the U.S. could introduce safe, recreational shooting to over 2,000,000 people a year. With the prospects of increasing anti-gun legislative pressure in the future, the implied benefit to shooting sports from Wingo should be obvious. The more people who are favorably disposed toward shooting, the more difficult it should be to pass irrational and unnecessary gun control legislation.

Wingo was developed on a systems approach. All pertinent facets of the sport, the environment, and human interactions were considered in detail. Considerable motivational research was conducted to determine the needs for successfully launching a mass-participation shooting game that would cater

to young adults from all income groups.

This project was not conceived to provide merely a basement-type shooting gallery for people to fire off a few rounds. The idea of Wingo was to involve people on an ego-level, appealing to a broad spectrum of human needs and gratifications. If there are some 20 basic motivations for human behavior, relative to how they recreate, Wingo has included most of them in the activity and environment.

While Wingo shooting fields are open for walk-in customers, major emphasis is put on teams and league competition, much like bowling. The physical layout of the spacious (30,000 square-foot) building includes a central concourse that looks out on 18 shooting fields—9 on each side. Each field is 75 feet long, and 15 feet wide, which includes a 25 x 15-foot area for team seating, control console, and a shooter's table.

There are no partitions between the fields, and the whole center has an open, "outdoors" feeling. Patrons can visually identify with the tumultuous activity going on all over the center. More intimate conversations can be held in two sunken lounges on the concourse. One (the Rally Room) caters to auto-racing fans and includes color slides of auto rally activities

This is the machine that manufactures and hurls the hollow ice ball targets. Each shooting field has a machine that produces six targets every 2 minutes, 6 seconds. The launching apparatus is electronically controlled.



The unique Wingo target. Note the sectioned piece of one of the targets showing the 1/10th-inch thickness of the walls. The center of the mould is visible between the thumb and little finger of the hand holding the ball. Targets are stared in the freezer cabinet in the background until they are ready for launching.



Special ammunition is used for the Wingo gun. The .20 caliber rimfire shotshell fits only in the special gun; no other ammunition will fit the chamber. Ammunition contains 119 #12 birdshot and spreads to a 20-inch pattern at 40 feet, compared to 125 pellets contained in the .22 long rifle shotshell. Gun is smooth-bored.

projected on one wall, plus low volume sound effects. The other lounge, (the Safari Room) projects African scenes with sounds of the jungle.

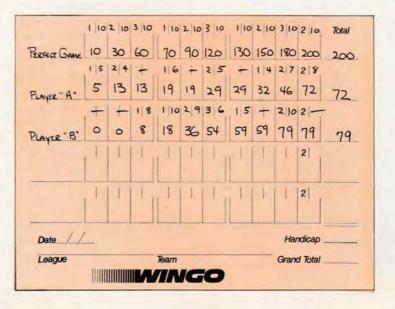
In addition, slides depicting "Great Moments in Sports" from just about every kind of sporting activity are projected on the walls of the open lounge areas. Sports themes on etched numbered panels that mark each shooting field show scenes from skiing, boating, fishing, swimming, etc. This idea serves to host many and varied sporting interests and associates them with the legitimacy of Wingo as a shooting sport.

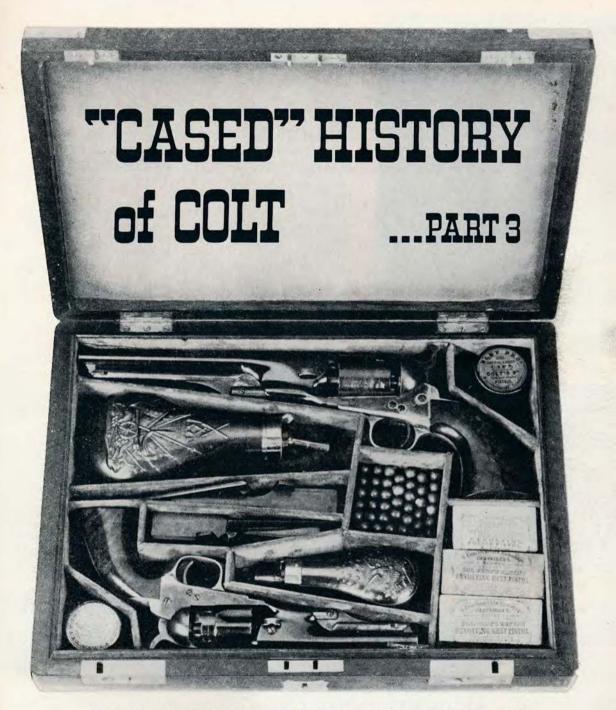
A snack bar caters light meals and dispenses beer and wine, and a liquor license has been applied for. A pert waitress will serve at the tables *outside* the shooting areas. No alcoholic beverages are allowed in the team areas. Food and drink can be ordered over the telephone on each control console. When our editor asked me to do a piece on Winchester's new "shooting and drinking" establishment, I was shocked into thinking that this might be the beginning of the end for shooting altogether. The idea conjured up visions of a merger between the WCTU and the gunhaters.

The whole atmosphere of the Center has just the opposite effect, however. Fail-safe procedures have been engineered into the system. Safety features, which will be discussed later, make it virtually impossible for anyone to be hurt. Even the most safety-conscious person would be self-confident at the Wingo Center.

Several major developments are associated with Wingo. First, no domestic guns were readily adaptable for Wingo shooting. Instead, Olin adopted a modified version of the Webley-Scott single-shot, Martini action for the new shooting sport. The gun, as used, weighs five pounds, seven ounces, has an overall length of 38 inches with a 22-inch ventilated rib barrel. Several modifications were made to render this gun acceptable to the new sport. One of the changes was the addition of an electronically-controlled safety that could externally arm or disarm the gun. A solenoid is actuated through an electrical tether attached to the fore end and connected to electronic game equipment located in the control console. The gun cannot be fired until the solenoid disengages the safety. This action, which is part of the electronic logic system, takes place just moments before the target is released while the shooter is standing ready for the shot. The tether also controls the movement of the muzzle so (Continued on page 70)

Official Wingo score sheet shows how points are parlayed from hits times the readout factor. Top line shows how a perfect game would be scored, with the shooter making all ten hits in the minimum elapsed time. Below are two scores that are typical for average league players. Notice the effect of making consistent hits with high readout factors compared to series where a couple of targets are missed. It's similar to bowling.





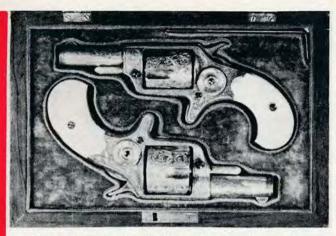
A very interesting casing for two different Colt models is this brass-bound case containing a Model 1861 Navy pistol and a Model 1862 Police pistol.

By JAMES E. SERVEN

SAMUEL COLT was the driving force in designing and promoting arms of his invention. He had the wisdom, however, to gather in his organization very capable men in the fields of design, production and merchandising. So it was that when the War between the States neared, Colt was ready with a streamlined Army pistol generally known as the Model of 1860.

This new model was designed to replace the big "dragoon" Army six-shooter and in it the weight was reduced from the 4 lbs. 2 oz. of the old pistol to 2 lbs. 11 oz. The round barrel was 8 inches long and gracefully contoured. The loading lever was no longer hinged to the lug of the barrel but was encased and worked on a ratchet system. Some called it "the creeping lever ramrod." It was an improvement over a ratchet type of loading lever first tried in the Model 1855 sidehammer pocket models.

A few of the early specimens were made with the old navy size grip, but soon the grips were lengthened about ½", making them suitable for big or small hands. Along with the pocket model of navy (.36) caliber the Model 1860 was the only Colt to have a rebated cylinder. At first some pistols were made with a full fluted cylinder such as used for a few sidehammer pocket pistols, but fluted cylinders did not have the strength for full charges behind the .44 caliber ball. A very few pistols with a 7½" barrel were pro-



The Colt "New Line" .32 and .41 caliber cartridge pocket pistols presented to George I. Moore, a prominent New York arms dealer in 1874. No partitions are used in this casing.

A neat leatherette case for Colt's .41 caliber No. 3 derringer cased in London, Eng.

duced but 8" barrels soon were adopted as the standard.

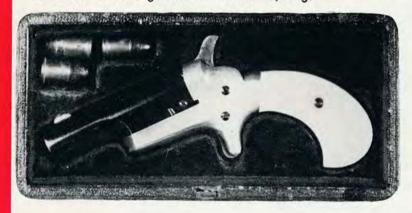
The Model 1860 frame was made with some variations. A so-called "Civilian Model" had no provision for attaching a shoulder stock. The great majority of pistols, however, were undercut at the recoil shield and grooved at the heel for attachment of a shoulder stock (carbine breech).

Although designed for the Army, the Model 1860 Colt retained the same ship cylinder engraving as found on Model 1851 Navy pistols. The words "Patented Sept. 10th 1850" which appeared on the cylinder referred to a patent involving the locking provisions.

Thousands of the Model 1860 pistols were purchased during the war by the federal government and they saw

active use in various hard-fought campaigns.

Following quickly after the Model 1860 Colt Army pistols. Colt produced a new Navy pistol called the Model 1861. Actually about the only change in this model from the model of 1851 was in the barrel. The old octagon shape with hinged loading lever was replaced by the streamlined shape with its encased ratchet loading lever.



One of the finest cased pistols ever produced by Colt. Now in the Phillips collection, this handsome outfit was obtained by the author in Spain. Along with the regular percussion cylinder this Model 1860 Army pistol is also designed to use a conversion ring and accompanying Thuer front loading cartridge cylinder; necessary loading tools for the rare metallic tapered cartridges are also included in the case. Note label on the cartridge box.

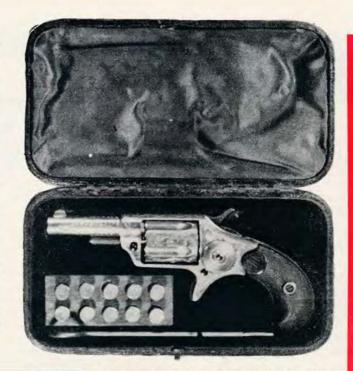


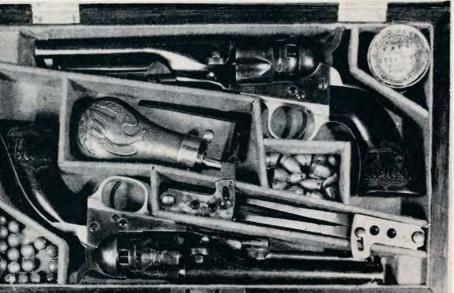
This was one of the best balanced and most attractive in design of any of the Colt percussion models. It appealed to army officers and civilians alike and many were handsomely engraved and fitted with a carved ivory stock.

This Model 1861 Navy pistol was the last Samuel Colt was to see in production. He died on January 14, 1862. Not yet 48 years old, and in the prime of a productive career, he was buried in Hartford with military honors.

Burdens of the remaining war years fell on the capable shoulders of Elisha K. Root who had joined Colt in 1849. In 1865 Gen. W. B. Franklin, fresh from distinguished service in the war, took the helm. These men were ably assisted by F. Alexander Thuer who, like Elisha Root, had been a member of the Colt organization since 1849.

The last Colt percussion model to be introduced was known as the Model 1862 Police pistol. This was a .36 caliber weapon designed to be used as either a pocket pistol or belt pistol. A model without a loading lever was made in very limited quantity and with a short $3\frac{1}{2}$ " barrel. Standard pistols had a $4\frac{1}{2}$ ", $5\frac{1}{2}$ " or $6\frac{1}{2}$ " round barrel, all with the stream
(Continued on page 57)

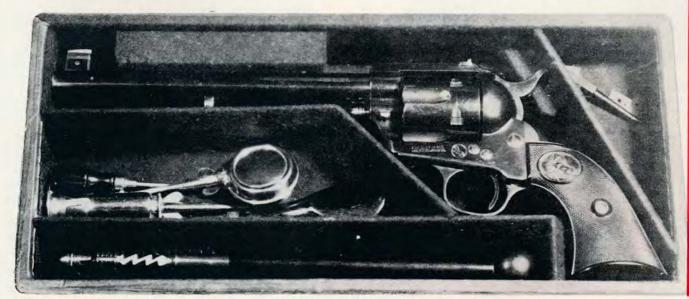




Above: This leatherette case contains an engraved "New .32" Colt. Satin was used on the lid. Note the cartridges.

Left: Any collector would be proud to own this matched pair of Model 1862 Colt pistols, shown in an American casing with the standard accessories. Note two bullet moulds, one for balls and one used for making the bullets.

Below: A partitioned saddle leather carrying case for a target model of the Single Action Army. This pistol was cased in London and brought to Texas by its owner many years ago. A cleaning rod with bristle brush, oiler, screwdriver, etc. are included.



Guns DO-IT-YOURSELF PROJECT

ATTACHING A

A FOREND TIP of plastic or some sort of contrasting wood has become so popular in recent years that practically all custom stocks include this attractive added feature. Even factory stocks by Remington, Winchester and Weatherby, to name a few, offer a forend of plastic or wood on some or all of their centerfire rifles.

To be sure, a well fitted and well shaped forend tips adds a certain flair and takes the plainness and "sameness" off what might otherwise be a pretty ordinary looking stock. Too, adding a forend tip to your next stock, or perhaps one of your old stocks, isn't at all difficult. Here's how to go about it.

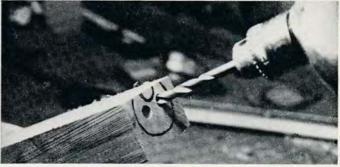
Since you're doing the work yourself you'll probably be thinking only in terms of some sort of contrasting wood rather than plastic. Plastic, at best, is only an imitation of wood, usually ebony, but wood is as easy to attach and looks a lot better. Different types of wood used for forend tips include ebony, walnut, maple, purple heart, zebra wood, tiger wood, rosewood and cocabola as well as other exotic varieties. Most of these can be obtained in block form from Brownell's, Montezuma, Iowa,; Reinhart Fajen and E. C. Bishop & Co., both of Warsaw, Mo.; Herter's, Waseca, Minn, and Frank Mittermeier, New York City. The price for a generous forend size block won't cost over two or three dollars, even for the most expensive wood and another buck or so will buy enough extra for a matching grip cap.

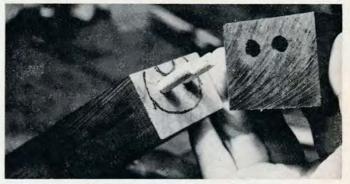
In years gone by the perminent attachment of a forend tip presented considerable difficulty because of the generally poor quality of the available glues. Therefore gunsmiths resorted to rather elaborate procedures to make sure the forend tip stayed in place after the glue aged and weakened. With today's super-strength epoxy glues, however, a strong, lasting wood to wood union is possible with a minimum of time and effort.

The first step is to make sure that the two wood surfaces to be glued together are perfectly smooth and flat. This is essential both for strength and appearance. An uneven surface, for example, may result in unsightly gaps between

Steps to follow, top to bottom: Table saw is used to square-off the end of the stock and the tip; dowel holes can be oversize using "eyeball" alignment; dowels in place and the forend tip now ready for glueing; fill the holes with glue before inserting the wood dowels.





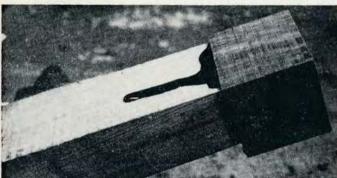


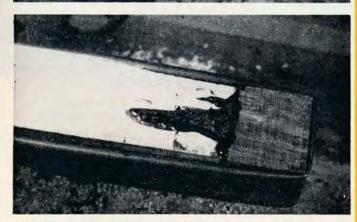


FOREND TIP

By JIM CARMICHEL









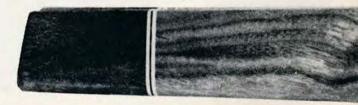
stock and tip and the reduced surface to surface contact will result in a weaker union. One of the best and easiest ways to get the mating ends smooth and perfectly flat is to saw both the stock and tip ends square with a miter box saw or a table saw. If the saw has small teeth the wood will be cut so smooth there will be little or no need for additional smoothing up. If any squaring or smoothing up is to be done be sure to use sandpaper wrapped around a stiff, flat surface such as a large file. This will keep the surfaces flat.

The tip may be attached in the classic right angle style or a more modern, racy angle. If you prefer the angle be sure the angle cut on the stock and tip match perfectly so the grain of each piece of wood will run in a straight line, otherwise the attachment will look cockeyed.

Though it has been demonstrated that a plain wood to wood attachment with the epoxy glues is sufficient to hold the forend tip in place it is wise (Continued on page 72)



A slightly modern and rakish look is achieved with the angled forend tip.

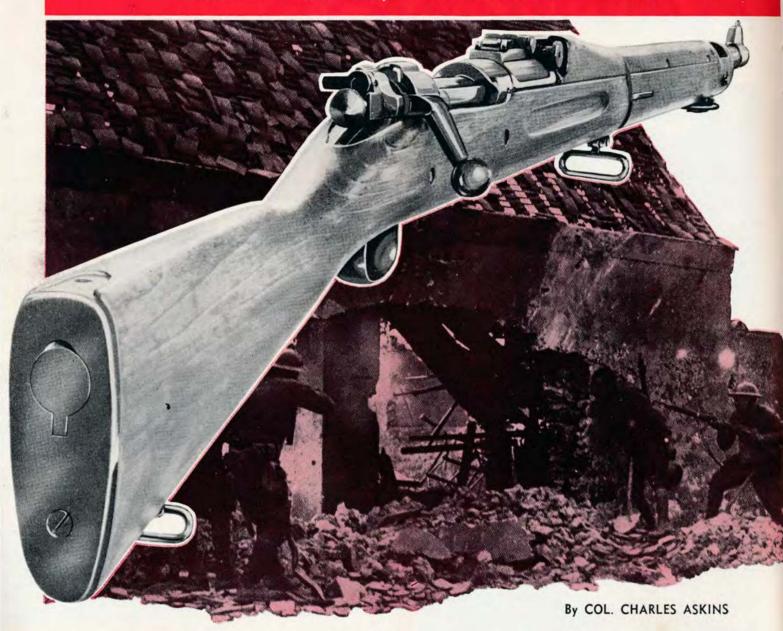


Conventional right angle attachment of tip with white spacers. Nice touch!

When the dowels are inserted, the excess glue will be extruded. Spread this over the mating surfaces; pressing the tip in place squeezes-out excess glue; a bicycle inner tube hold tip firmly in place; overall view of the inner tube in place. Only hand tools are needed for project.

UNITED STATES RIFLE

CALIBER .30, MODEL OF 1903



THERE HAS probably never been a rifle which has endeared itself more to the American shooter than the Springfield Model 1903. From the time of its adoption on June 19, 1903, until well after the close of World War II, the rifle was a favorite of many thousands of users. During its long years as the service weapon of our military forces, and after it was relegated to obsolescence by the M-1, it continued to serve as a sporter.

Supposedly retired by the adoption

of the Garand in 1936, it was manufactured during virtually all of War II, the last A-3 being made on the 19th of February, 1944. This rifle was produced by the typewriter firm, Smith-Corona, who turned out 234,580 units. Remington also made Springfields and during the 1939-45 embroglio produced 343,085 '03's and then switched to the A-3. At the same time they also made the A-4, this was the sniper rifle.

After the war thousands of the rifles were given to our allies. Many thousands were purchased from these same allies overseas and returned to this country where they were sold by arms dealers. Surplus stocks were purchased by members of the NRA through the Director of Civilian Marksmanship. Most of these rifles were converted to sporters. The action was sufficiently strong to support the new family of magnum cartridges and because of its length would accept most of the super loads. Next to the Mauser '98 there have been more '03's sporterized than any other action.



Just who had the honor of sporterizing the first '03 is lost in antiquity, but a fellow who has justifiable claim would probably be the author and big game hunter, Stewart Edward White. He had the gunsmith. Louis Wundhammer of Los Angeles, work over a Springfield in 1910 which he later used on two African safaris. White shot countless lions with the .30-06 and thought it was completely competent for the big felines. Today they have laws in Africa against the use of calibers smaller than .375 for the great cats. Teddy Roosevelt, about the same time, had a Springfield sporterized and he also took his refurbished rifle to the Dark Continent with him. Since then,

tens of thousands of the sturdy old gun have been rebarreled, restocked, and rerigged, to the satisfaction of the new owners.

The Springfield action is a takeoff on the '98 Mauser. The government paid Mauserwerke some \$200,000 for patent privileges when we commenced to manufacture the rifle. This was in 1900, and the new model then went through a series of changes until it was officially adopted in 1903. At first it had a 30-inch barrel and a folding rod bayonent which fitted in the forestock. It was chambered for the .30 caliber cartridge which used the old 220-gr. Krag bullet. It was driven at 2300 fps MV, using W-A powder, developed by Whistler and Aspinwall, a nitroglycerene base powder, which was so destructive to barrels that the average Springfield tube had an accuracy life of only about 1,000 rounds at 2300 fps. The velocity was then reduced to 2,000 fps MV, the same as the Krag.

In 1906 the Army adopted a nitro-

cellulose base powder and at the same time adopted a 150-gr. flatbase bullet. Velocities were then hiked to 2700 fps MV. At the same time the case was shortened in the neck by .07" and all the Springfields then in issue to the troops were recalled and the barrels were shortened at the breech end to accept this new cartridge. It was called the .30 caliber 1906 round. From this alteration has come the popular designation, .30-06.

From the adoption of the rifle until the beginning of World War I almost one million of the arms were produced by Springfield Armory and Rock Island Arsenal. Once the cartridge was standardized, the barrel shortened, and the old "claw-hammer" rear sight replaced, the rifle remained unchanged. Through all of the first world war the receivers had been pretty soft. This also included the bolt. On February 20, 1918, Springfield Armory made a major change in the heat treatment of both receiver and bolt. They made this



change cleanly, commencing with rifle #800,000. Rock Island Arsenal was slower to switch over to the new heat treatment and they made the change on May 11, 1918, with receiver #285,507. This was a forward step for it virtually eliminated the occasional failure which had occurred in earlier Springfields. Later on, Springfield attempted to give the older receivers a second heat treatment—those made before the changeover—but this was none too successful.

In 1928, after 25 years of manufacture, the first change was made in the Springfield. It was in the shape of a new stock with a pistol grip, the elimination of the grooved forend, the buttplate was checkered and a serrated trigger was added. These changes were designated as Alteration No. 1 and the military then dubbed the rifle M1903-A1.

The M1903A2 was not a rifle at all but simply a barreled action, fitted inside the bore of the 75 mm tank cannon. Its purpose was firing practice at reduced cost. You won't see any of these kicking around but mention should be made of the A-2 variation to keep the record straight. The M1903A3 did not come along until we got involved in WW II. More about it directly.

In between the A2 and A3 variations of the Springfield were a bevy of special purpose '03s. There was the NM grade Springfield which had the "Type C" stock with the pistol grip and sans finger grooves in the forestock, a stargauged barrel, the bolt in the white and polished, and usually there was a reversed safety, an ejector of nickel steel, and sometimes a headless cocking piece. This rifle was made up each year before the National Matches and was shipped out to Camp Perry for issue to the competitors there. After the matches the rifles were recalled to Springfield and reconditioned for the next matches. A small coterie of craftsmen at Springfield did all the workon the NM grade rifles and these workmen took a good deal of pride in their efforts. They were meticulous to see that the rifle shipped to Perry was a really good one. As a result the fellow who could purchase a NM grade rifle at the matches or afterward, through the DCM and as a result of his NRA membership, was a lucky gunner!

The business of the star-gauged barrel has been the source of a good deal of confusion since it is a practice that is no longer in vogue. The so called star-gauge tube was not specially bored and rifled. It was a barrel picked by the use of the star gauge. This was a micrometered measurement instrument which passed through the barrel and indicated variances as small as .0001" as it moved up the tube. If the barrel indicated an acceptable diameter, both in grooves and over the lands, which fell within the minimum and maximum standards, it was stamped on the muzzle crown with a star. Thus we had a star-gauged barrel and one you may be sure that shot very well indeed.

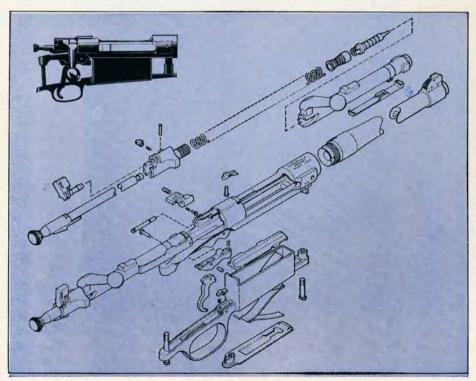
So well established was the reputation of the Springfield that during the 1930's the Armory decided to build a sporter. This was done and a few thousand were produced. This was essentially the barreled action set up in a sporter type stock. A Lyman #48 micrometered rear sight was added and the rifle was known as the NRA style. It was an instant hit with riflemen and most especially with hunters everywhere. In fact it was so popular that the commercial arms manufacturers raised hell about it cutting into their sales. That particular model was dropped from production.

Just occasionally, altho it is rare anymore, you will see a Springfield with a slot milled in the left side of the receiver. This was done during WW I for the installation of the Pedersen device. This was a development, named for its inventor, which con-

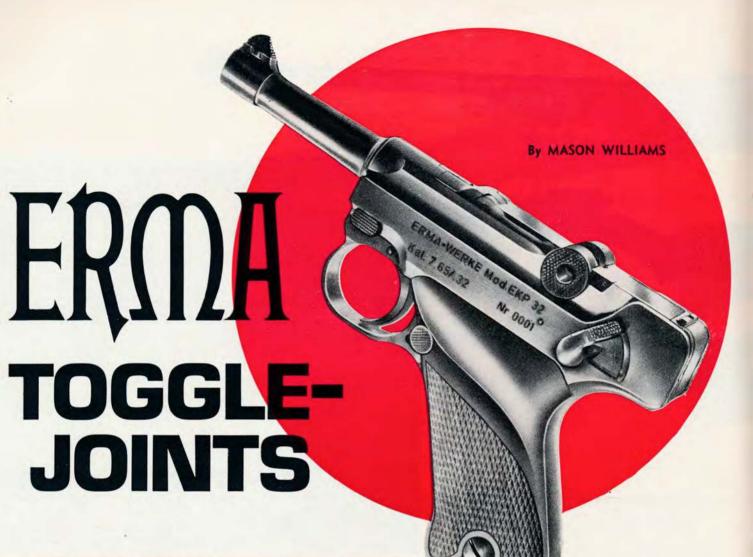


verted the Springfield to an automatic. It fired a tiny cartridge similar to the .32 ACP round. The slot milled into the receiver permitted the horizontal magazine to enter the firing mechanism. Those rifles so altered were stamped "Mark I" on the receiver ring.

During the 1920's and 30's, a comparatively few special rifles were made up. These were target arms, most of them for our Olympic teams, and for long range firing at our own national matches. The "Style T" rifle was one of these. It had a 28-inch heavy barrel, a tube that measured 1.250 inches at the breech and tapered to .860 at the muzzle. It was tapped and drilled for scope mounts and carried the Lyman 48 rear sight. It weighed 121/2 pounds. For the international matches of 1921 and '22, Springfield Armory collaborated with the Marine Armory at Philadelphia and turned out a number of rifles which had a hooked buttplate, palm rest, headless cocking piece and set triggers. A Lyman 48 sight was attached. In 1924 another set of team rifles was made up, much like these described here, except John Garand was enlisted and he made up a speed lock for the arms. The barrel was 30 inches, a length later reduced for the 1927 matches to 28 inches. On these latter (Continued on page 66)



#48 receiver sight. Total weight is about 8 pounds, 12 ounces.





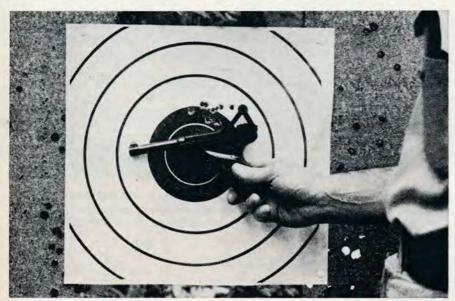
With the toggle-joint back in the open position it is possible to see the projecting end of the firing pin that extends out through the center of the breech face. This acts as the ejector.

A^{LL} my life I have been fascinated by the Luger pistol mechanism and have owned a few over the years. There have been various attempts to literally duplicate this mechanism since the last war but, as far as I know, none of these proved satisfactory, mechanically or financially. Erma of Germany has finally succeeded in developing what appears, at first glance, to be a Luger that has been left out in the rain overnight and which is commercially known as the "Knebel Gelenk Pistole." This miniature toggle-jointed pistol comes in .32 ACP, .380 ACP and, in a slightly larger version, in .22 long rifle. Both types are manufactured by Erma Werke in West Germany. The U. S. distributor shipped the .380 and .22 long rifle versions to me for testing.

Needless to say, these pistols are not



The .22 long rifle pistol turned-in groups of this size showing the excellent accuracy of the little gun. Sight improvements plus the smoothing of the trigger pull would cut the size of groups in half.



The .380 caliber toggle-jointed pistol turned in groups almost as small as the .22 long rifle. Both pistols have a tremendous amount of built-in accuracy and are ideally suited for the casual shooter.

based on Georg Luger's famous design nor are the interior parts comparable. Erma has taken the basic idea and modified it for modern day production, thrown in a lot of what appear to be cast parts and has produced a tight, tough little set of pistols. Finish is excellent possibly due to the excellent castings and the lack of rough machining that is seldom polished out in the final finishing. However, due to the extremely tight fit of all parts, both of my pistols required a lot of firing before they loosened up enough to really function smoothly. The trigger pull on both handguns was quite rough and unnecessarily heavy but a few moments work with an Arkansas stone produced a nice, clean pull considering that neither pistol pretends to be a target weapon. In other words, purchasers should put a couple of hundred rounds through the .22 long rifle pistol and at least a couple of boxes through the center fire pistol before rushing off to the dealer. This tight fit of all parts should give long life and rugged dependability to both versions of this pistol. Just shoot them in!

The .380 ejects its cases by allowing the firing pin to protrude through the breech face, thus camming the case out from under the extractor claw and sending it spinning through the air, high and to the right front of the shooter. It is possible to have three or four empty cases flying through the air at one time. The .22 has its firing pin machined into the front of the firing pin block. Inside this block is a long thin pin that runs through the center of the breech face and which, like the .380 firing pin. extends far beyond the breech face during recoil. This similarly cams the fired case out from under the extractor to send it on its way. I had only enough time to run a few boxes of cartridges through each pistol but I had no extractor or ejection problems during this relatively limited firing.

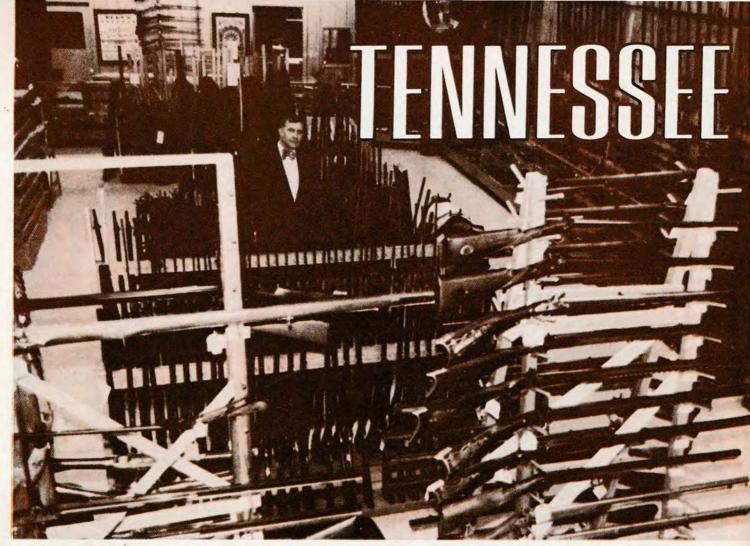
Both pistols point well. It is possible to stand in front of a target and empty the clip into a relatively small area because the hand and grip angle enable the shooter to instinctively point these guns. Once I modified the trigger pulls, I was able to stand fifteen yards in front of a target and fire some amazingly small groups and I was continually surprised at the superb accuracy of both pistols regardless of the ammunition used. Let me get into this for a moment.

In caliber .22 I used Federal, Winchester, Remington, CCI and CIL's Canuck cartridges. Until I had put about two hundred rounds through the pistol, the Winchester Standard Velocity cartridges would not reliably function the action but, as the parts wore in, the Winchester ammunition performed better and better. At the start I needed High Velocity cartridges to correctly function the mechanism. At the end, I could mix up the various brands and not have any problems.

In .380, I used Federal, Norma and Super Vel. (Continued on page 73)



This is the tool supplied with the .380 as an aid in loading the magazine. It is merely stamped metal but it saves thumbs and fingers in an operation that would be a chore without it. A good design feature.





Turner Kirkland, sparkplug of Dixie Gun Works, is shown in the main showroom area open to all. Eye-pleasing displays make shopping a pleasure.

By GEORGE C. NONTE

IN 1954 TURNER KIRKLAND was a typical travelin' man—a drummer, if you will—who was a lot more interested in guns than his vocation and livelihood. Like most other gun buffs, he was hardly ever without some "tradin' stock" in his car trunk. In fact, he traded a good bit more than most and had regular gun stops and regular customers (both buyers and sellers) along the route through Tennessee and Mississippi, assigned by his employer.

In Turner's own words: "I came home one weekend and found I had enough gun and parts orders stacked up to keep me busy most of the next week just packing and shipping. I sat down right then and wrote my boss in New York and told him I quit, just like that, then started filling that pile of orders. It took me till the next Tuesday, working right through Sunday. That was in April, 1954, and I've been full time in the gun business ever

Rows and rows of reproduction muskets stacked up in the warehouse waiting shipment to customers are inspected by Kirkland. Modern facilities allow orders to be shipped-out quickly.

MUZZLE LOADING SUPERMARKET



Kirkland's personal collection of guns contains this Elgin Cutlass Pistol, one of the rarest of U.S. martial arms, and many other fine rarities.

since. It has really kept me humpin'."

The first six months were the hardest, during which Turner worked out of his attic (you think you got problems with a place to work!). Then for a while he worked out of a garage on the back of the homestead lot before graduating to a bona-fide business building, a vacant auto dealership in Union City, Tennessee.

Thus was born in early '54, the DIXIE GUN WORKS now known the world over for its vast store of muzzle loading guns and gear and the biggest catalog of same in the industry. Mail orders from all over the world pour into the Union City post office, not a few to the "DIXIE-KIRK" cable address.

Turner had really started much earlier, being a gun buff almost from birth, and a natural-born horse-trader. Even as a toddler his father bought him 50-cent and dollar muzzle loaders. He'd been buying and selling guns and parts for many years; visiting gun shows; ferreting out original guns; etc. From '48 onward he'd been advertising

The massive catalog is updated and kept under control by Ernest Tidwell, Kirkland's right-hand-man for over 15 years. Over 6500 different items are listed making this quite a chore.

No where in the world will the ML enthusiast find treasures like those at Dixie Gun Works.

modestly in the gun papers—of which there were damn few in 1948. As he tells it, gun and parts trading augmented a small income and was practically essential to make life comfortable. In those days there weren't any "new" reproduction guns or parts, so everything Turner sold had to be "shook out of the bushes," as veteran traders usually put it.

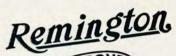
From that modest beginning, Dixie Gun Works has grown to be the major supplier of parts, accessories and supplies for muzzle loading shooting: to offering its own extensive line of new guns; and to large sales of almost every M-L item made or imported by other firms. Newly manufactured parts for all manner of guns, including complete locks and barrels, furniture castings, stock blanks—virtually all things imaginable—are on hand by the hundreds of thousands.

Many new items are now made abroad for Kirkland by companies specializing in investment casting and related techniques. And, therein lies a tale in itself that antedates the DGW name.

About 1950 Turner learned that a couple Liege, Belgium, firms were still making muzzle loaders for the colonial trade. "I sent one (Continued on page 67)



GUNS . APRIL 1971



OUPOND

HEAVY JACKS, TEXAS TICKLERS, MAIZE KNIVES

Mirror Finished Blades (Except RB1240 and R921)



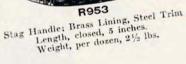
Nickel Silver Trim Stag Handle; Brass I Length, closed, 43/s Weight, per dozen,

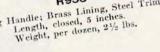
Collecting RB 1240 rown Bone Handle; own Bone Handle; Lining and Bolsters th, closed, 5 inches. t, per dozen, $3\frac{1}{2}$ lbs.





Nickel Silver Trim
Pyremite Handle; Brass Lining
Length, closed, 4½ inches.
Weight, per dozen, 2½ lbs. R1225







R1023 Nickel Silver Trim Stag Handle; Brass Lining Length, closed, 4½ inches. Weight, per dozen, 2½ lbs.



Pyremite Handle; Brass Lining Length, closed, 5 inches. Weight, per dozen, 2½ lbs.



R-921 obolo Handle; obolo Handle; ining and Bolsters n, closed, 4½ inches. ht, per dozen, 2¾ lbs.

Nickel Silver Trim Stag Handle; Brass Lining Length, closed, 3% inches. Weight, per dozen, 2 lbs.



Nickel Silver Trim
Pyremite Handle; Brass Lining
Length, closed, 3% inches.
Weight, per dozen, 2 lbs.



By WARREN SHEPARD

REREAD the want ad in disbelief. Wow—\$250!

Could it be that some nutty collector was willing to lay out two and a half C-notes for a pocket knife barely forty years old?

I laid down the magazine and quickly dug out my little collection of Remington pocket knives, searching for the gold mine I was sure I had. But, alas, no cartridge finial was to be found; my knives had shields, stars, acorns and circles, but no cartridges.

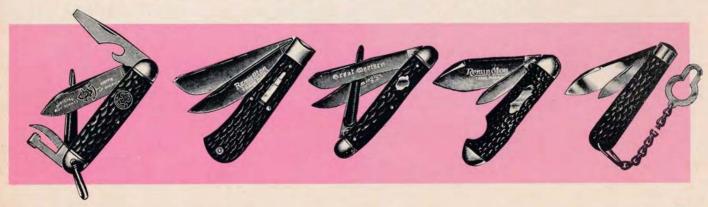
Looking at an old Remington catalog, I found that several different models carried the cartridge finial, mostly known as the *Hunter Knife* or *Hunter's and Trapper's Knife*. Retail price, in the mid-1930's, was two to three dollars, depending on the model and number of blades. At \$250, that's a pretty healthy mark up.

Remington tooled up for cutlery manufacture at Bridgeport, Connecticut, in 1920. By 1923 about forty models of pocket knives were being offered; the line increased to 180 models in 1925 and 300 plus, by 1936. Despite growth and success, Remington's cutlery business was sold to the Pal Blade Company in 1941.

The exact reason for the big arms maker's short lived experiment in cutlery is not certain.



This Remington "Sportsman's knife" is of particularly fine quality; note "acorn" finial on handle.





Remington Sheath knife, No. RH28 was forged from one piece of steel. It sold for \$1.50 with sheath in 1932.

However, it should be noted that following World War I, most of America's large arms manufacturers were forced to diversify due to the sudden halt in military orders. In 1919, the Winchester Repeating Arms Company of New Haven, bought out the Eagle Pocket Knife Company and the Napanock Knife Company for \$214,000 and began marketing a line of pocket knives under the Winchester name.

Remington had some cutlery experience from their production of bayonets during World War I. Perhaps Winchester's move prompted them to go into sporting knife manufacture. However, unlike Winchester, who bought out existing cutlerers, Remington tooled up their own shop and hired old world cutlerers to run it.

I asked Remington's Jack Mitchell (who, with his famous trapshooting father, Clyde Mitchell, has been associated with Remington for nearly fifty years) about the company's knife business. His reply:

"My only memory of the cutlery business is the stories about the German (Solengen) and English (Sheffield) cutlery craftsmen who moved their families to Bridgeport from Europe. Many of them still retained their attitudes on apprentices and training as well as pride in their craft. Their skills combined with American engineering know-how produced a line of consistently fine cutlery."

For twenty years, Remington offered America's finest selection of high quality pocket knives at competitive prices. Remington's business, as a top maker of sporting knives between the World Wars, was dropped as soon as government orders for arms and ammunition began to pour in in 1941. According to Mitchell, Remington has no current plans to re-enter pocket knife manufacture.



I began buying old pocket knives about eight years ago. I found them in second hand stores and junk shops. My highest priced Remington folding knife set me back one whole dollar. Then, at a gun show three years ago, I saw a little Remington Gent's knife change hands for thirty-five dollars. Almost simultaneously want-ads began to appear, offering eight dollars and more for any Remington knife. I was tempted to unload.

But I didn't. It seemed clear that a new collecting fad was about to hit. Current strong demand and high prices for Remington pocket knives bear this out. Recent offerings in a dealers' magazine have included: a Remington Boy Scout Knife in mint condition at \$90.00; another with handle repair at \$31.00; and a Remington two blade pocket knife in very good condition at \$25.00. These same knives were sold for under three dollars in the 1930's. Dealers are now offering fifteen dollars and up for any Remington knife. And it looks like prices may go higher.

For those interested in learning more about Remington knives, American Reprints, Box 6023, St. Louis, Mo. 63193, offers a handsome reprint of the 1936 Remington knife catalog for only \$2.50. It shows more than 26 pages of knife models, from the pearl handled "Gent's" model up to the big sheath knives. In addition, there are instructions on how to sharpen knives, a page showing how knives are made, and two full pages showing all of the blade styles made. The opening page of this article shows a typical page from this catalog.

Dig through your old pocket knives. If you find an old Remington, with the cartridge inlay, maybe you can trade it for a Parker shotgun, or a used Volkswagen.



Remington knives were offered with many types of handles. Shown here are stag, pyremites and nickle silver.

Pocket knives were big sellers, and the stag handled models were popular, but they did make others, such as the center knife with a patriotic motif.







THIS pistol is also known as the New Model Pocket Pistol and Root's Patent Pistol. It was made from about 1857 to 1872, and is found in either .28 caliber (actually .265) and .31. Models were made with 31/2 octagon barrels and with 31/2" or 41/2" round barrels. This is the only Colt percussion pistol using nipples which are integral with the cylinder-they are not removeable. (Some .31 caliber cylinders have been found with re-

Elisha K. Root joined Sam Colt in 1849 as superintendent of the works. During his tenure at Colt's he designed many items used in the manufacture of guns, including the drop hammer,

Root's firearms designs included the sidehammer system for both rifles and revolvers. Although many sidehammer guns were sold, this system was probably the least efficient of all of the Colt designs. The small, delicate working parts and features of the cylinder-pin turning device caused many mechanical failures. The system proved more practical in the larger mechanism of

No sidehammer pistols were manufactured in London, but a few specimens have been found which bear the "Address Col. Colt-London" marking. These were made at Hartford for the English trade and often bear the letter L (London) preceeding the serial

The pistol shown here is cased in the English style. It is .31 caliber with a 41/2 inch barrel, and is unfired! Photographed by, and from the collection of, Dr. R. L. Moore, Jr.

FOR THE MAN WHO







Today's american shooters and collectors are well accustomed to the commemorative-type guns that are being offered by many of the American gun makers. Two of the best known for this type of endeavor are Colt and Winchester, issuing commemorative guns for battles, statehood, people and organizations that have become famous in the firearms field, or through their use.



Top left: The complete Set of Five in the Brazilian rosewood cabinet. The matching grain of the stocks is clearly evident here as well as the storage space for the carrying cases. The maintenance equipment drawer has been extended for viewing. Left: At far left in the drawer are the cleaning brushes and the ivory handled screwdrivers. The snap-caps are at right. Design of the cabinet is strictly functional, yet it retains a beauty of it's own to fit into any decor. Above: The Managing Director of Holland and Holland, Mr. Malcolm Lyell, whose inspiration led to the building of the Set of Five. Over 1300 hours was spent on each gun in the Set to insure perfection. Instead of a butt-plate being fitted, the end of the butt has been checkered.

HAS EVERYTHING!

The 1970 Set of Five would surely delight any shooter.
Perfection is the by-word at Holland & Holland, and this series exemplifies their age-old tradition of fine guns.

Holland and Holland Firearms of London has overcome the doldrums of commemorative issues and is offering something that every shooter, and especially commemorative collectors, would dearly like to own.

Holland and Holland has provided an outstanding example of a willingness to retain the old world ways of gun making in the form of a matched set of five shotguns fit only for the rich and royal. Called the "1970 Set of Five," each gun has been hand crafted and over 1300 hours have been spent on each gun. All of the Holland and Holland guns have been made to standard shotgun measurements with stocks that are a bit longer than normal, but are alterable within certain limits to the purchaser's specifications for a perfect fit. Each gun features a "half pistol-grip" stock that is not particularly popular in Britain, but quite fashionable and accepted in the United States.

The unique idea for such a set of guns is that of Mr. Malcolm Lyell, Managing Director of Holland and Holland. The set is comprised of a pair of 12 gauges, a pair of 20 gauges and a 28 gauge, all housed in a cabinet of Brazilian rosewood designed by Algernon Asprey and made by Gordon Russell of Broadway, Worcestershire, England. The cabinet is a work of art in itself and is completely lined with the finest Scottish hide in a beige color.

Included in the cabinet is a complete set of ivory handled screw-drivers, greenheart cleaning rods, gilded cleaning brushes much like our old shaving brushes with the soft camel hair bristles, and ivory boxes containing spare strikers for each gun.

To shoot the guns is one thing, but to take them into the field without the proper cases would be sheer blasphemy. So, Holland and Holland has provided cases for the guns. The pair of 12 gauges share one case, the pair of 20 gauges share another and the 28 has a case all it's own. These cases are made of willow calf leather, ox blood in color, and there are three cartridge bags and three cartridge magazines and a picnic magazine in the same leather, in each case.

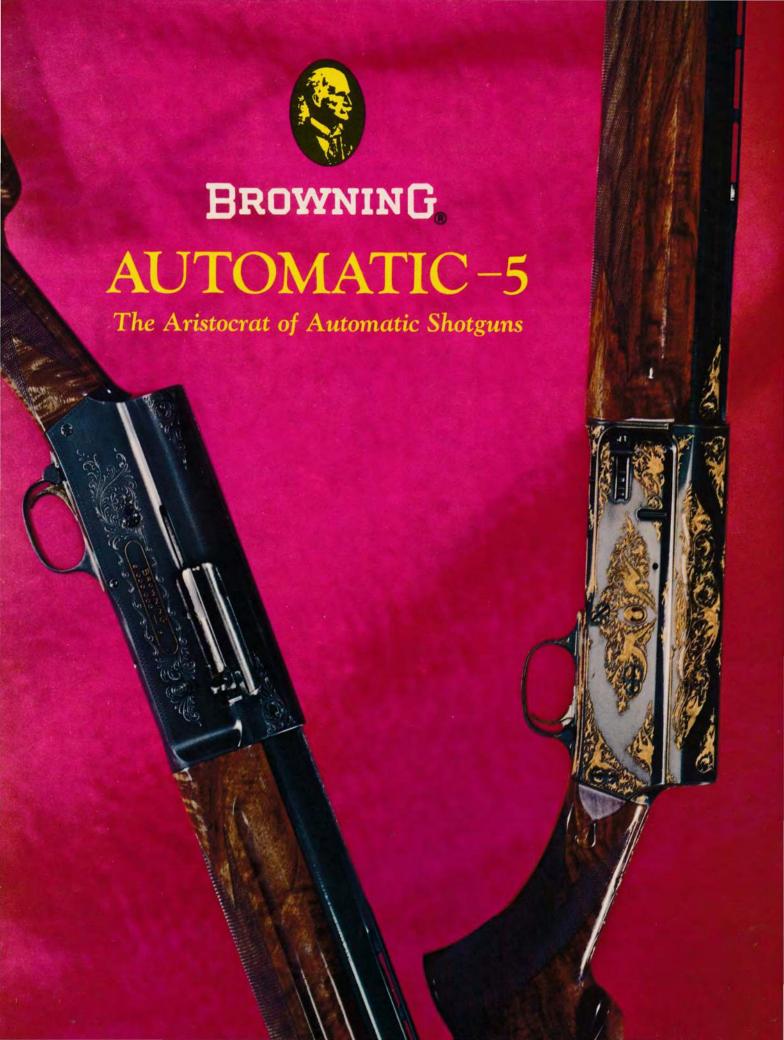




Both sides of the action and lockplate as shown on the 28 gauge gun. Top photo shows the Mourning Doves and the lower photo depicts the Bob White Quail. The engraving on all the guns is impeccible. Notice how the wood is perfectly fitted to the metal, and the finish. These scenes were taken from those done by the great British wildlife artist and expert Archibold Thorburn.

For the un-initiated, the picnic magazine contains three flasks, one each for whisky, brandy and sherry, goblets, dog whistle and a game counter.

Since their beginnings early in the last century, Holland and Holland has numbered each gun consecutively. The Set of Five are numbered 40,000, 40,001, 40,002, etc. and are the newest of the 40,000 series. They all have (Continued on page 58)



GUN OF THE MONTH lours WIN THIS

BROWNING

Automatic-5 Shotgun

NOTHING TO BUY, NO ENTRY FEE!

Simply mail a plain post card with the required information to GUNS Magazine TODAY and you will be eligible for the April "Gun of the Month" drawing for the Standard Browning Automatic-5 Shotgun. In the hands of sportsmen the world over and in every type of scatter gunning, the Browning Auto 5 has passed every test. The Standard Model which will be the prize will provide years upon years of pleasant and dependable shotgun service. It is America's favorite shotgun.

For additional information on the complete line of Browning firearms, write Browning Arms Co., P.O. Box 500, Morgan, Utah 84050

Sponsored by GUNS MAGAZINE and BROWNING ARMS CO.

All you do to enter is fill in the required information on a plain post-card and return it to GUNS Magazine. Be sure to enter bottom line information-GM, April Guns. DO NOT MALL ANY ENTRY IN AN ENVELOPE! Your name will be entered in the drawing to be held April 10, and the winner will be announced in the Aug. issue of GUNS MAGAZINE.

DO NOT USE ENVELOPE! MAIL POST-CARD TODAY

G M April	GUNS	Magazine
City	State	Zip
Address		
Name		
GUNS Magazi 8150 N. Centi		kie, III./60076

SAMPLE FOR INFORMATION ONLY



The Hunter's World By Charles F. Waterman (Random House \$15.00)

It is not often that a book of this caliber is published. And when it is, it is a more than welcome edition to any library, no matter what field of interest is involved. This is the book for hunters. It is for men who are aware that the game they seek exists in an environment of many dimensions.

The color photography in the book, as well as the reproduction, is some of the best we have seen. It is combined with tastefully done black and white photographs of all types to make a most pleasing and cheerful tome that is easy to read and understand. Two hundred and fifty pages, with 300 pictures (193 of them in full color by outstanding wildlife photographers) make it interesting reading for one and all. Any outdoorsman would appreciate the efforts that have gone into this book.

It follows hunting seasons from northern Alaska to southern Florida noting the behavior of everything from mountain goats, sheep and moose to migratory birds and rabbits. To say that this book is a "must," would be a gross understatement. H.A.M.

U.S. Test Trials-1900 Luger By Michael Reese II (Coventry Publishing Co. \$7.00)

During the seven years of research invested in this study of the 1900 Luger, the author uncovered many rare and certainly interesting examples of this gun. Illustrations throughout the book are excellent with the exception of some of the letters and correspondence dealing with the original test trials. These are the original letters dealing with the individual test reports and unfortunately age has not been in their favor as many are unclear, and a bit difficult to read.

Until now the Luger collector's library has contained a void on this subject and since this book is the first one to appear on the subject, that gap has now been bridged. Of particular interest and significance is the section which identifies the location and even the exact serial numbers of those test-Lugers known to still exist. This area of the Luger has been hotly contested for many years and this book should become a standard reference for Luger collectors to help clear the air of mystery of the 1900 Test Trials. It may be considered "must" reading for the Luger collector, no matter which area or time period of this famous pistol is of interest, H.A.M.

Japanese Hand Guns By Frederick E. Leithe (Borden Publishing Co. \$8.50)

Oddly enough, there has never been as much interest in Japanese militaria as there is in that of the European powers. While some of the weapons to come out of battles and wars in which the Japanese were involved can be considered nothing short of "dangerous," many of their guns are genuinely fine pieces. Unfortunately the collectors have passed up these guns in their quest for others. This book is not intended as a historical or technical guide to the Japanese hand gun. Rather it is designed as an identification guide giving descriptions and characteristics of the different sidearms used officially by the Japanese armed forces since the early 1900's.

Relatively little is known about Japanese handguns and as time goes on, those who do have that information are invariably lost. Most, if not all records of production were destroyed by the massive B-29 incendiary raids during the war. Thus, the only records available are from the actual workers in the factories.

Excellent photographs, probably the best we've seen on the subject, are the book's finest virtues. Characteristics of each model are given as well as an explanation of the various markings. An extremely interesting section on miscellaneous weapons and equipment illustrates the different types of magazines, holsters and ammunition used by the Imperial Japanese Forces during the war.

There are very few books in print on this subject that so clearly define the various weapons used by the Japanese. If there is anything better, we haven't seen it. For the Japanese gun collector or the casual military collector there is none other. H.A.M.



BUTCH CASSIDY'S TEACHER—

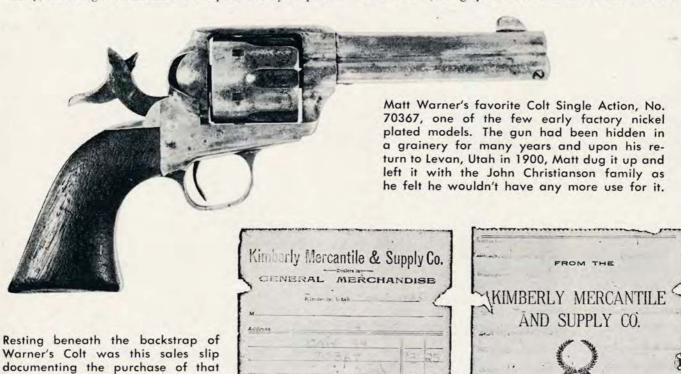
MATT WARNER

By E. DIXON LARSON

IT IS SURPRISING the history that still is buried and can be unearthed if one is properly motivated. Sometimes it requires a lot of patience in traveling, talking with people who may be of little help or reading many pages of dull newscopy files in hopes of just one little fact. Such was the case that surrounded a recent legal entanglement among the relatives of Willard Erastus Christianson, better known as Matt Warner, for the possession of an unpretentious old Colt Single Action six shooter No. 70367. The Frontier Colt, made in 1881, was given to Matt by the originator of the Hole in the Wall hideout, Tom McCarty. Matt purportedly used the gun during his outlaw career from 1881 until 1896. Frequently guns with documented history cannot be purchased for any price; however, in this instance, and to restore tranquillity in a tumulted family, the Judge recommended complete family disposal

of the arm to a disinterested party. A protective condition was insisted by the heirs, which stated that the purchaser could not sell or dispose of the weapon for the remainder of his life, lest it again enter the family and present a problem—this was agreed to.

When a collector obtains such a historic piece, naturally an unquenchable thirst for additional information follows. Although the arm itself was merely a black powder .44-40 caliber, 434" barrel with one-piece walnut grips and the remnants of some original nickel finish, which is not too common on the early ones, it did possess one unusual document. Resting beneath the backstrap was a well-preserved original sales slip from the General Mercantile store of Kimberly, Utah. This would be a rare collector's item in its own right, for Kimberly, Utah has long since reverted from a ghost town to almost nonexistent remains. Apparently the backstrap was never removed. As most collectors know, the grips can be removed without disturbing



gun, #70367 in 1885. The price was \$13.25! The town of Kimberly, Utah is now a non-existent ghost town and has reverted back to nature. Almost nothing is remaining.



Very rare photo of Matt Warner shortly after his release from Utah Prison in 1900. No photos of the young Matt have ever been published. Most photos show Matt in his late 60's, no younger.

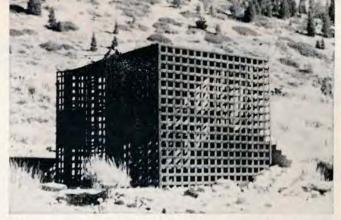
the backstrap and the grips. In fact, most avoid this because damage to the grips can result.

To many, the name "Matt Warner" is meaningless. To others it is as familiar as Billy the Kid, Jesse James, or especially. Butch Cassidy. When a collector starts to research almost from scratch, it can be done without any prejudices involved. In the case of Matt Warner, the facts obtained are as interesting as a T.V. spectacular or a multimillion dollar movie.

Willard Erastus Christianson was born in Ephriam, Utah in 1864, the son of a Swedish father and German mother. His father, Christian Christianson, was a Mormon Bishop. In his early teens the family moved to Levan, Utah, a small quiet farming community even today, and is located about 95 miles south of Salt Lake City. Matt's oldest sister, Teenie, married the Robber's Roost gang leader, Tom McCarty, Undoubtedly, Matt, or Willard at this time of his life, probably had a hero worship for his brother-in-



Remains of the "Half House" Saloon where the \$10,000 bill was used as "credit" and pasted on the wall by Matt and "Butch." This presented an accounting challenge that eventually forced the owner out of the saloon business. Money came from Nat'l. Bank of Denver.



Nothing remains of Kimberly, Utah except the two cell steel jail which was originally housed in adobe brick. Many of the "Wild Bunch" sobered-up in this jail that obviously wasn't as easy to "break" as movies make it.

law, Tom, who already had attained a considerable prominence as a "wanted man" and leader of the Hole in the Wall gang.

Even with the great imagination of Hollywood writers, it would be difficult to conceive of a more interesting plot than the circumstances that caused Matt to leave home at the early age of 15 and take to the "Outlaw Trail." The old timers of Levan remember the church social that Matt had attended, and the girl named Alice Sabey he was escorting home when the event that changed his life happened. Matt and Alice were joined by Andrew Hendrickson, a few years Matt's senior and one who apparently didn't believe three made a crowd, or maybe he thought that his prowess was greater (Continued on page 54)



The saloon named "Castle Rock" with girls upstairs and an outside staircase. "Butch" Cassidy and Matt spent many hours here, purportedly on the main floor drinking and carrying on. It's obvious where the saloon got the name.



THE LATE AUTUMN afternoon was like winter, with the jagged summit of the mighty Karwendel range blanketed by a half-foot of fresh snow. Parading up and down in front of us were a dozen rut-crazed Austro-Bavarian hirsch, roaring blood-tingling oaths back and forth across a half mile wide stretch of the Isartal. Beyond, lay the royal hunting estate of the crowned heads of Belgium. A territory every bit as untouchable as the stags we watched and admired, but quickly rejected as being too good.

This was Neu Fall-a charming niche in the Alps which looks similar to the traditional backwoods Bavaria. Where the once rustic timbered dwellings have given way to a crescent-shaped community of glittering white stuccoed duplexes. Where the ornately-carved green and white verandas are strangely absent; where the broad, sweeping asphalt streets clash too strongly with the ancient logging wagons that creak their laborous way back into the rugged hinterland. And where the recently completed Sylvenstein dam stands as a concrete monument to the old, picturesque Fall that lies buried in its icy green depths.

It is also the scenic high country of Bavaria, formerly hunted only by the eagle, the stag, the barking roe, the chamois, and a couple of hundred of the town's rugged inhabitants. But, this too has changed. The Deutche Alpenstrasse—another unwanted legacy of the Faller people—now flashes along the precipitious sandstone cliffs, making tourism a blight on this last of the great Tolzer wilderness areas.

Only the mountains have withstood the test of time. But the most impressive of all are the mighty red deer stags that reign supreme over this land of many paradoxes.

As an Army Master Sergeant, I was stationed then in Bad Tolz. One of my longtime hunting ambitions in Germany was to shoot a "good" Faller hirsch, From what I'd seen and read these stags are nearly the equal of any in Tito's prime hunting grounds of Belje. Heavy-maned, bull-shouldered brutes, their antlers may sport up to 22 points and weigh as much as 15 pounds. Such a hirsch was bagged by a member of the royal Belgian family in the fall of 1958 near the village of Hinteris. A year later a "mere" 20 pointer was taken by a big business executive from Munich. But the more common of the trophy racks are those with 14 to 16 points. These sorrel stags roam the country around Fall with a sort of open defiance that has made them almost legendary; helping to perpetuate such classics of Bavarian literature as "The Jaeger from Fall," by Ludwig Thoma, one of my wife's all time favorites.

So, when I got sudden word in the fall of 1959 that my hunt was arranged beginning the next day, and would span the peak of the mating season during the first week of October, I nearly flipped. There was a matter of getting a leave of absence from my job at Lenggries, provisions to buy, and a lot of other frantic, last minute preparations. But with the help of my devoted wife I got everything together before the hunt dead-line

The rifle I picked to take along was my pet Springfield '03 with set triggers, silver inlays in the stock, a Nickel 6X scope, and a long list of kills behind it. My choice of ammunition was a full box of 180 grain Corelokts, which was a radical departure from my usual stag loads of 150 grains. But knowing the size and tenacity of these Faller hirsch, I definitely wanted a bullet that would penetrate their tough hides and not go to pieces. The last article I crammed into my rucksack was a fifth of good stateside bourbon. I don't know of anything that will crack the rugged exterior of an alpine jaeger quicker than this precious commodity-provided it's given with no strings at-

Leaving the house at noon, I took a lot of good natured ribbing from a

couple of my neighbors, I was dressed in my usual lederhosen, knee-length, green woolen stockings, a black Tegernseer fedora with a chamois brush stuck in its brim, a short tyrolean jacket, and I was carrying a rucksack. A native hunting garb that always seems to draw a few snickers from the American GI's and dependents, but which impresses the German jaeger fraternity quite differently. They appreciate a foreigner who will accept their ways and customs; and sometimes this appreciation can mean the margin between a so-so stag and an excellent trophy.

Arriving in Fall an hour later, I met my guide, Herr Lupperger, a big raw-boned, cheroot smoking humorist with a slight moustache and a bald pate. I liked him the moment he stepped out of the Forstamt to greet

"Grüss Gött, Herr Woolverton," he grunted, gripping my hand in a viselike grip. "You look like a real Bayerishe jaeger. Congratulations!"

Then he added with a wry grin, "I have a 'prima' hirsch all staked out for you. I promise you, you'll have him before sundown."

Needless to say, my hopes skyrocketed! As a rule these German jaegers are a real pessimistic lot. So throwing rifles and duffel into my car, we headed out of Fall while half the Forstamt staff stood on the steps waving goodbye to us.

The European red deer stag is about half the size of a Wapiti. Other than this, there really isn't too much difference between the two. Their massive antlers are fashioned in the same way, except that the stag is more noted for its sur-royals, and has a distinct reddish coloring over most of its body. The only marked difference is that a stag in the rut roars somewhat like a mad Hereford bull. He doesn't emit the shrill bugling call of the elk. But they both have the heavy rutting collar, the same regal carriage, and the flaming "sunflower" on the rump. In essence, our elk are reputedly descendants of these magnificent animals. So the stag is quite a prize.

All the way back into the hunting area, Herr Lupperger was simply ecstatic about this hirsch he had picked out for me, which he kept referring to as Old Peter. "Ein grosse 12 ender," he boasted. "Beams as big around as my wrist, beautiful crowns." He even showed me where the big hirsch crossed this tote-road every afternoon around 4 o'clock. Save for a moment when he had to get out of the car to guide me over a crumbling concrete span, he never did stop bragging about Old Peter. He really had a strange passion for this hirsch.

It took us exactly 30 minutes to drive the 5 rugged kilometers to the south rim of the Sylvenstein dam where we planned to hunt. In some spots the narrow, winding mountain road was nothing but a quagmire of mud. In others, I was forced to detour way to the right to avoid the dizzying drop offs. But once we hit the vast alpine plateau where Old Peter was supposedly lurking, the route straightened out and we had clear sailing the rest of the way in.

Following a moment's deliberation. Herr Lupperger decided to take a stand in the woods. So after parking my Olds about a half-mile up an old. deserted logging road, we grabbed our rifles and gear and legged it for this hut-like affair tucked away in a thin neck of dark timber. We were camped in sort of a basin with mountains flanking us on both sides and a huge meadow faintly visible through the trees to our right oblique. The stand was a fairly decent one. It sat flush with the ground and had good visibility on all four sides. The only sector that gave us any problem was a brushy culvert that ran parallel to our immediate front. Matted with tall ferns and a lot of weathered timber slashings, this trench swung back around to our left and disappeared up a rocky mountainside. It was a dandy place for a hirsch to give us the slip.

"How come this stand is on the ground?" I asked Herr Lupperger. "All the others I have ever seen have been in trees."

"Well, Herr Woolverton," he replied with a grin. "This one is usually reserved for the elderly VIP's who find tree climbing a little exhausting. Here they can sit in comfort, admire the scenery, and sometimes care less if they get a hirsch or not. They mainly come out here to get away from the hustle and bustle of city life."

We had sat there for about 2 hours, sipping coffee and alternately watching and listening. The afternoon was real pleasant, and I could understand why an old retired Forestmeister would want to come out here and just relax. But time was beginning to drag.

"How much longer?" I asked Herr Lupperger.

"Oh, maybe 10 minutes," he murmured. "Maybe a little longer."

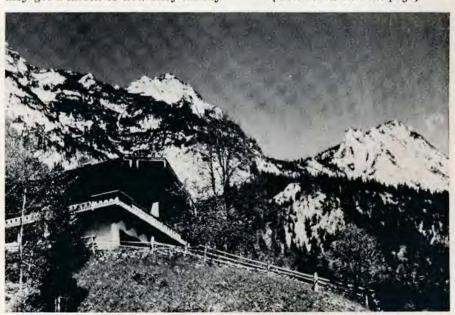
Well, we waited. First 10 minutes, then 20, then 30—still no sign of Old Peter. Things were pretty quiet, except for the periodic crackling of the birch leaves. They gave us quite a start. Then I noticed Herr Lupperger getting a bit fidgety. He was starting to wring his hands, which was something I hadn't noticed before. So I started to offer him a cigarette to calm his nerves. When all of a sudden something let out a thundering roar that raised both of us clean off our seats.

Poor Lupperger came unwound! "Old Peter, Old Peter," he started pointing wildly. "Over there by the trees! In front of you! Can't you see him?"

Scared half out of my wits, I couldn't see a damn thing. Just a bunch of brush and maple foliage. But I heard a helluva lot of popping and cracking noises like some steer was tearing the hell out of the undergrowth. But I knew damn well it wasn't cattle. There weren't any around here. At least not at this time of the year.

That's when I saw it! This huge antler sticking above the trench, rocking back and forth like a dead mesquite branch. It looked a good yard and a

(Continued on next page)



Typical habitat of the Faller hirsch near the town of Neu Fall.

half long, and as Herr Lupperger had said earlier, as big around as his wrist. Throwing my glasses on it, I distinctly saw the halberd-shaped tines of the crown. But that's all I saw, Then it disappeared.

It was a good half hour before we saw the stag again. In the meantime we'd moved across the road and taken up a stand overlooking the meadow which I mentioned before. It was Herr Lupperger's idea to catch the hirsch as he came out of the woods, seeking a harem. And the plan was good, except for one flaw.

The stag facing us wasn't Old Peter. Instead, it was a big 14 pointer with horns as black as pitch—a real "Zukunftshirsch." Herr Lupperger suddenly looked like somebody had kicked him in the pit of the stomach.

"I can't believe it. I can't believe it!" he started muttering to himself. Then he just sagged.

A "Zukunftshirsch" is strictly an untouchable. Translated, it's a stag of the future; a young, robust superhirsch that's protected for its breeding potential. They're worshipped like some tin God until they reach 12 or 14 years of age. Then they lose their diplomatic immunity.

Driving back into Fall that night, I couldn't get over the look on Herr Lupperger's face. His jaws were so tight you couldn't have gotten a toothpick between them. All the while he was cussing out Old Peter for not showing up. It was as though he had a real hate for this particular hirsch. So I asked him, "Why do you want to get Old Peter so bad? What's wrong with another hirsch?"

Then he blurted out the whole story. Old Peter was a notorious bat-



Hunting stand in the trees.



Herr Lupperger, guide, the author, and the Faller hirsch of his dreams.

tler. For the past two years he'd been raising cain with the "Zukunftshirsch," driving them away from the females and in general plundering the mating grounds. So the Oberforstmeister decreed that Old Peter had to go. But Herr Lupperger also had a very personal reason. About a week prior, the cantankerous old stag had run a horn through the guide's "Schweisshund," not killing the little dog but inflicting a fairly serious wound. Which explained why the dog wasn't along with us because a "Schweisshund" is usually considered indispensable on a stag hunt. They're terrific trail dogs. So Herr Lupperger had very good reason to want to get this hirsch, but Old Peter wasn't too cooperative.

It was the next afternoon before we got a chance to hunt again. We had planned to go out early that morning, but the valley was socked in with a solid layer of fog. We couldn't see beyond 50 feet, so we turned around and came back. But the afternoon was beautiful. In sharp contrast to the day before, it was ideal "Brunft" weather. The air was chill and a stiff breeze was blowing off the mountains, rimming the basin we were sitting in. We had decided to occupy the same stand at the edge of the meadow.

After getting settled, we just sat back and admired the scenery. The whole valley was laid out before us like a green mantel. At elevations above 1600 meters, the peaks were starting to gather snow. I remember throwing my safety off and fixing a good, comfortable rest for my rifle.

That's when all hell broke loose! It sounded like half the mountain had suddenly caved-in behind us. Jerking around, we saw female red deer pouring down out of the hills by the score, followed by awkward calves and a bunch of spindly legged, young stags. Inside of minutes that portion of the meadow in front of us was teeming with grunting and cavorting red deer, glad to be rid of the flies and their cramped daytime quarters.

Herr Lupperger was aghast! He hadn't seen so many red deer concentrated in one place since the last winter feeding. And I was just plain stunned. "Get set!" Herr Lupperger stammered. "Keep your eyes peeled on the base of the mountain. Watch the draws!"

The mountain he was speaking of was the towering 1700 meter Henneberg, a near vertical slope of dark timber and jagged rock outcroppings, facing us from about a quarter of a mile away. Running up and down its north face were these heavily-wooded draws where the hirsch retreated to during the heat of the day. And from any of the sharp ridges, the stags had a "bird's-eye" view of the valley below.

I watched these canyons until my eyes began to blur. If there was anything up there, they were sure keeping quiet and out of sight. The mountain started taking on a purplish cast. Far off in the distance we heard the church bells chime 6 o'clock. We had about an hour's shooting light left. Turning to Herr Lupperger, I pleaded for reassurance. All he said was, "Wait!"

Then just before the mountain fell into complete shadow, the big stags opened up on the far side of the basin. First one, then another, until the whole valley reverberated with their lusty challenges. It was music to stir

any jaeger's soul; vibrant and primitive. We spotted six right off the bat, hugging the fringes of the tall timber that bordered the meadow. There must have been at least another half dozen roaring defiance from part way up the slope.

The six stags slipping into the basin were about 400 yards away. Any one of them would have made a wonderful trophy. They were standing broadside to us, about 200 yards apart. I was all lined up on a beautiful 12 pointer, just waiting for the magic word.

Then I heard all these choice Bavarian oaths, and just knew the "devil" had reared its head again. "A lot of 'Zukunftshirsch'," Herr Lupperger was swearing bitterly. "Every damn one a 'Zukunftshirsch'!"

Which is precisely where this story began; recalling another bitterly disappointing hunt in the Fall area a couple of years prior. But instead of being after a 1A hirsch, which is the very pinnacle of a stag hunter's dreams, I had a permit for a very minor 2b stag. Which is strictly a cull. Anyway, I spent 4 tortuous days on the trial, running up and down Alps like a chamois, and all we saw were "Zukunftshirsch." A total of 14 magnificent stags, the smallest a heavyheaded 10 pointer. I didn't get a shot during the whole trip. And this hunt had every indication of turning out the same way.

Then something happened that makes all stories worth telling. It was like a delayed action bomb.

While we were still watching the hirsch, now numbering about a dozen across the basin, this tremendous stag came bustin' out of the woods where we'd seen the 14 pointer of the day before. But this was a different 14 pointer. I could tell by the weight and span of his massive antlers, which laid well back over his powerful shoulders. It wasn't Old Peter. But he was every bit as mean as Herr Lupperger had described the 12 pointer to be. I never saw a hirsch in such a rage. And the moment he roared, everything else in the valley seemed to die.

For the second time in this hunt, Herr Lupperger came unwound. He snatched up his glasses, sized-up the hirsch, groaned a little bit, then looked again. He kept this up for a good five minutes. He seemed to be deliberating with himself. And all the time it was getting darker. The anxiety was killing me.

"What is it?" I finally asked Herr Lupperger. "Is it another 'Zukunftshirsch'?"

"I can't be sure!" he hesitated. "I've never seen this hirsch before. Maybe he wandered in from Austria."



Author, right, and Herr Lupperger.

Then he dismissed the hirsch with a shrug of his head. So I did too. But not without a lot of regrets. He was the best stag I'd come across in 14 years of hunting in Germany. But I still couldn't keep my eyes off this magnificent brute. He was the most savage hirsch I ever laid eyes on. In a matter of minutes he had run every hirsch clean out of the basin. And what he couldn't see, he roared into submission. There wasn't a single stag out of the dozen we saw that would

stand and challenge his rights to the herd. It was incredible!

Yet he still wasn't satisfied. He came charging back in our direction like a loco steer. Getting within 50 feet of us, he rolled back his eyes and let out a roar that almost had me looking for a quick exit. I'll tell you I was plain scared. Because there wasn't a thing between him and us but grassy turf. It was a frightening sight. But at least it got my mind off of Old Peter. Who never did show up that night.

Which could have been the reason for Herr Lupperger's sudden change of heart. Because a moment later, he blurted out, "Sheiss!" and I liked to have fell out of the stand. Caught completely off guard like this, and with only a couple of minutes of daylight remaining, I got the shakes so bad I could hardly hold the rifle steady. And Lupperger's constant prodding to shoot wasn't helping the situation any. So I took a couple of deep breaths, trying to relax myself.

The way things are in West Germany, members of the U.S. Forces stationed there are authorized to shoot only one 1A stag every 3 years. This declaration has to be made in writing at the time you submit your

(Continued on page 59)

51



European red deer stag known as the "Zukunftshirsch" in all its glory.



O VER ninety-nine percent of the American public have all the requisites for being good clay target shooters. Most of the ninety-nine percent can become great shooters if they really want to. Breaking clay targets is easy. Any individual, man, woman, boy, or girl, of any age group, who is gifted with normal eyesight and coordination can easily break flying clay targets in the games of trap and skeet. People with serious physical and visual handicaps not only often win major tournaments but shoot well every week of the year.

Age is no barrier to good performance. Some national champions did not take up the clay target games until after they officially became senior citizens. Little tykes barely out of kindergarten, whose guns are longer than they are tall also win major championships not just infrequently but with regularity. If we were to isolate the shoot reports from trap and skeet clubs for any week of any year, we would find not one but several instances in which kids from nine to ninety, of both sexes, either shot very well or won trophies.

Some shooters win major championships in their first months or years of competition. Others take longer to develop tournament skills. That breaking clay targets is easy is not idle theory on my part, neither is it a sudden revelation.

I have been associated with the clay target sports of trap and skeet for almost forty years, and have personally witnessed every situation claimed in this column, not only once but frequently over the years. During my years as a field man for the old Sportsmen's Service Bureau, I was present when thousands of little boys and girls, and more than a few handicapped and/or retired persons broke every clay target thrown for them. And, in well over half of these situations, the shooter broke his or her targets the first time he or she ever

fired a gun. I may be read out of the fraternity of clay target gunners for puncturing some of the mystique with which some of my fellow shooters are prone to surround themselves.

It is both rewarding and ego-stimulating to bask in the public eye as some sort of a specially gifted person because you can hit a flying clay target with a charge of shot, but it just ain't so! Anyone can do it, if they only will.

We are reminded daily by all of the media that in these fast-moving times, every individual needs a hobby or recreational outlet. After an objective study of a whole host of possible hobbies and recreational opportunities, I can only conclude that the games of trap and skeet more than meet just about all the criteria set forth as ideal.

No special equipment is needed for the games of trap or skeet, other than a shotgun, which is within the financial reach of any gainfully employed person in the United States. There is no season on trap and skeet. Gun clubs shoot every week of the year, even in the more frigid climates. Trap and skeet have no age or sex limitations, and as I have documented, require no special skills.

Contrary to the generally held opinion, trap and skeet are not unusually expensive. If the shooter reloads, his financial outlay may be less than for many other sports and hobbies. Conversely, if it is desired, the shooter may go all out, and obtain some of the world's most beautiful and finest equipment.

If the shooter needs challenge and competition, he or she may progress all the way from local club shoots through state, regional, national, and international tournaments. Most sports require that a competitor win at each level to move on from local to state, regional, and national tournaments. Any shooter, even if he or she has never won a single trophy, can participate in the national champion-

ship events of trap and skeet. And, it is the rule rather than the exception that some first-time shooter will win a national trophy on the first try.

Spare time is not usually a limiting factor. Many gun clubs are open every day of the week, others two or three days, and increasingly large numbers of clubs shoot at night as well as during the day. If you have only an hour or two to spare, you can get in a round of either skeet or trap. If your social needs are met by spending the day at the club, you can do that.

If you are a solitary person, and don't feel the need for chit-chat or companionship, you can shoot your rounds with a minimum of social contact. If, on the other hand, companionship is your bag, trap and skeet are made to order. Many shooters follow the tournament circuit not to win, but just to visit with friends from all over the nation and the world.

Travel opportunities? Unlimited! Should you care to combine your hobby or recreation with travel, follow the tournaments all over the nation and to Europe, Asia, Bermuda, Puerto Rico, the Bahamas, and others.

Many doctors frankly tell me that smashing a flying clay target is one of the best therapies they can prescribe for dissipating the pressures brought about by today's society which throws us in close contact with people not of our choosing and who may be exceedingly abrasive to us.

Let's assume that you are the head of a family, and are trying to pick a recreational outlet that is valid for all of the year, as opposed to just a week or two, or a few times per year. Many of the hobby or sports outlets you must choose from will rather effectively exclude your wife, all the children, and either your parents or your wife's parents, if they enter the picture. May I offer you a challenge? Find a copy of the monthly trap magazine, "Trap & Field," or the monthly skeet magazine, "Skeet Shooting Review." Any copy of any month will suffice. Read either magazine and record the number of shoot reports which indicate that grandparents, parents, and children of both sexes won or shot well in the same event, on the same day.

Can you name any other possibility for family fun which meets all the requirements over any considerable period in time? What about the safety factor, you may ask. After all, trap and skeet are shot with guns, and guns are a no-no in the eyes of many of my friends. No sport or hobby can better the safety record of trap and skeet. There has never been a fatal accident to a trap or skeet shooter in more than a century of shooting.

My sport should provide some physical exercise, you say. If it's walking or exercise you need at the gun club, you can set your own limits. If you want to walk up and down the line, you can go home deliciously fatigued.

If on the other hand, you want to take it easy, plop yourself down and don't move until it's your turn to shoot. There is no rule or custom which dictates either form of behavior. You will have company regardless of which course you choose.

Let's take a look at another potential for good in clay target shooting. For reasons largely beyond your own control, your job and life style is such that you and your wife have little opportunity for a shared activity outside the home. Shooting trap and skeet together provides not only a shared activity which can fascinate both of you, but which can give Mama a chance to achieve in her own right. In fact, if you are not careful, she may beat you at the game.

You'll have to handle this one on your own. I know a lot of women who are far better shots than their husbands, but I have never observed any conflict as a result of this situation. I have seen some very proud husbands pulling for their wives, and I have cheered my wife on many times, even when she beat me (at trap or skeet).

Entry to a gun club is not predicated on wealth, status, or social position. I have shot in the same squad with corporation presidents, movie stars, and day laborers, and have never detected any indication that they cared one whit who I was or what I did. All that seemed to matter was that all of us wanted to enjoy a round of shooting.

In conclusion, if there is a hobby, sport, or recreational outlet which combines all the potential for enjoyment and fulfillment found in trap and skeet, I am not aware of it. If you shoot trap or skeet, my congratulations. If you don't, in the light of all that I have said, why not give these games a try?





FREE CATALOG

"Quick-Draw" Holsters

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

S. D. MYRES SADDLE

P. O. BOX 9776 EL PASO, TEXAS ZIP CODE 79988



A MUZZLE LOADING SPECIAL!!!

\$150

CHOICE OF FLINT OR PERC.

BUILD YOUR OWN KENTUCKY RIFLE & SAVE \$80.00! COMPLETE YOUR OWN FAMOUS H & A MINUTEMAN RIFLE AT HOME.

NOW AVAILABLE IN KIT FORM - NO POWER TOOLS REQUIRED TO COMPLETE THE JOB. All metal parts are fully finished, no machine work or power tools required, only a wood rasp and sandpaper needed, complete job can be done on your kitchen table.

Stock is fully machine inletted, drilled and fully contoured, needs only a bit of rasp work and sanding.

Barrel is fully finished but left unblued so it can be either blued or browned.

Booklet of complete finishing instructions and general muzzle loading information and

loading data included free.

Regular price of complete rifle \$179.95

\$9950

SPECIAL! HAVE TWO TYPES OF MUZZLE LOADERS IN ONE!

With purchase of conversion kit in either flint or percussion, we will supply an extra barrel sights and lock of opposite type for only \$47.50. Now you have flint and percussion at no extra work—the locks and barrels are completely interchangeable.

MAKE YOUR OWN WINCHESTER 94 CENTENNIAL RIFLE Put New Life Into Your Old 94 Winchester With A New N. A. C.

Octagonal Barrel



Make your own Centennial
N. A. C. Model 94—30/30 Cal., Barrel is 26"
long, Completely machined—threaded—chambered, with
standard front & rear dovetail slots. Polished and Blued, ready to install. \$24.95

-27

N. A. C. barrels for Models 90, 62 and '06 .22 LR cal. 84" neross flats-24" long. Ready to install. Only \$17.95.

N. A. C. Remington Model 12 and 121, .22 LR Cal. barrels R4" across flats—24" long. Ready to install. Only \$17.95.

STEVENS FAVORITE NEW BARRELS

One of America's favorite single shots—usually found with shot out barrels. Our new barrel, made just as the original, full finished and of our usual large quality ready to install. Simply insert bbl., marked file notch for receiver screw. For 1915 favorite and Stevens 418, 22 L.R. ... Only \$15.75 ppd

AT SUPER PRICE REDUCTIONS

SHOTGUN BARRELS

MODEL 11 REMINGTON



1" TOP MOUNT .22 SCOPE RINGS

Fits all .22's with grooved re-ceivers. Takes all standard 1" scopes. Easy to mount. No holes to drill or tap. Just slip on and tighten.

\$7.95 PER SET.

U.S. CARBINE "OVER THE BORE"
SCOPE MOUNT

reloaders. Rugged all \$6.95



Takes all standard 1" scopes. Easy to mount, Only one hole to drill and tap.

MAUSER LOW SCOPE SAFETIES

SPECIAL! 4 for \$9.99





THESE BARRELS ARE COMPLETELY FINISHED, BLUED, WITH MAGAZINE RING AND BARREL EXTENSION READY TO SLIP INTO YOUR GUN.

SATISFACTION GUARANTEED

SEND CHECK OR MONEY ORDER SEND 35g FOR MUZZLE LOADING COLOR CATALOG VISIT OUR ENLARGED RETAIL STORE



All items in this ad are legal to be

shipped mail order

MATT WARNER: "BUTCH" CASSIDY'S TEACHER

(Continued from page 47)

than Matt's, Also many of the old timers remember Matt for his temper.

According to news files, Matt decided to eliminate his competition, one Andrew Hendrickson, by picking up a dislodged picket from a fence and bestowing it on Andrew's head until he lost consciousness. Matt. believing he had killed Andrew, in panic packed some food, saddled a bangtailed mustang and rode out of Levan in search of the Tom McCarty gang. In the years that followed he fell in with cattle thieves, highway bandits, holdup artists, and graduated at the top of the outlaw profession-bank robbery. During the progress of his career the need for self defense was realized. Matt established a gunman's reputation both for accuracy and speed. In his own writings he states: "You never used a six-shooter, you throw it on your object, just like you throw a rock along your line of vision. A man to stay alive must practice to shoot just as straight as he looks. Your gun talks, right there at your hip." He also said: "A real gunfighter wouldn't look at a double action, the machinery is too complicated and uncertain. If you can't shoot fast, keep your opponent from shooting straight, fan it, jump around." A few years after Matt caught up with Mc-Carty, Matt met George LeRoy Parker (Butch Cassidy) in the streets of Telluride, Colorado while promoting a "rigged" horse race. Roy Parker said he was out to take the "Lady Fingered City Sneaks." Parker was four years Matt's junior, but it was friendship between the two men from that day on. Matt's diary tells how Parker got the name "Butch." After the Telluride, Colorado bank robbery. Tom McCarty, Matt, and Parker, hid out at Thompson Springs, in the rough country of Eastern Utah. While relaxing at the springs, Parker picked up Matt's big needle gun which used such long shells and kicked so hard Matt and Tom called the gun, "Butch." Parker was standing on the edge of the springs fondling the big gun when it discharged and flipped him into the mud on his backside. From that moment on, it was "Butch"

Parker. Later Butch added the name "Cassidy" in memory to a rancher who befriended him, a Mike Cassidy.

Butch and Matt were within an inch of height of each other, or 5'8" tall. Butch 155 lbs., and Matt a little chubby at 170 lbs. Both were carefree,

to test his ability. Matt had a preference for a .44-40 caliber Colt with the shortest barrel they made, the 43/4". Matt liked the versatility of the six shooter caliber which also chambered in his Winchester, which would make it an 1873 model. He states that at first he tried a long-barrel Colt thinking it would shoot further, but found he wasn't sure and it was too hard to sit down with, or hide under a coat and it also took too long to draw. Matt's chance came to try his ability when he had a horse stolen from him in Southern Utah. He trailed the thief, a Mexican named Polito, who also had a reputation as "handy with a gun." When Matt faced Polito, (as Tom McCarty once wrote for a documented record in Manti, Utah in 1899) "to show how kind and thoughtful either

If in Relating my experience as fan bestSow. I'm able Is

yourine But one
Potenial Crims That
Erime Does not Pay
and Be Instrumentall
I'm in Fluencing
him so seconda
fair abiding Eitzen
I Shall Fell That
my Life has not
been Lived In Vain
matt warner

Matt's final message before his death on December 21, 1938. His daughter is still living in Price, Utah.

adventuresome, and with a tremendous sense of humor. All records and interviews with those living, indicate that the local people never regarded them as potential killers. In fact, most old residents of Levan still consider Matt as a fine fellow—the best with a gun, but always fair in every way. Matt is on record as saying he couldn't wait to kill his first man. After hours of practice he felt he had

Butch or Matt could be, a good example is when Matt outdrew Polito, a dirty horse thief (they never stole horses) shot him in the lung and then rode 'hell bent' to Ashley, Colorado for a doctor who saved his life." But as Matt said, "I was not thrilled, but sick when Polito went down because he tried for too much speed and no accuracy." Matt Warner was to become known throughout the West as a

train and bank robber, who eventually became a courageous law officer after serving a prison sentence. The first planned train robbery with Cassidy was November 3, 1887, five miles east of Grand Junction, Colorado on the Denver & Rio Grande Railroad. Things didn't materialize too well, as the Express Clerk refused to open the safe even with the barrel of Matt's .44-40 against his temple. Both bandits were amused and decided in the best democratic fashion to abandon the idea for lack of preparations and they bade the Engineer and Agent a "Cheery Good Night" and rode off.

Some years after the Andrew Hendrickson incident, Warner learned by running into his brother, Moroni, that Andrew had survived; but as Matt put it, "too late."

and casually mentioned that he had overheard plans of some bandits to rob the bank. The President in excited fashion asked, "My God, man, how did you happen to overhear this?" Calmly, Warner replied, "Cause I planned it." "Butch" and Matt laughed their way out of the bank, escaping with \$20,000. Matt escaped to Star Valley, Wyoming with his share, which by toss of a coin, was unfortunately a \$10,000 bill. Realizing he could never cash it, he glued it on the wall of a saloon to backup his credit and entertain his friends. This presented an accounting challenge that eventually drove the owner out of the saloon business. Many bank robberies followed, such as the Bank of San Miguel at Telluride on June 24, 1889, recorded by the Pinkertons as an ingen-



This photo of the Matt Warner family was taken after his reformation. He became loved and respected in later life.

Butch once wrote, "Matt and me give lots to the poor to square our feelings." A hired railroad detective named Walker wrote in 1894: "There never was two greater loved outlaws, as nobody will tell me nothing, and they know plenty."

The Pinkerton files relate an amusing incident during the holdup of the First National Bank of Denver on March 30, 1887. Upon entering the bank, Matt called the President aside ious, clever, daylight, unbelievable robbery. About 1892, Butch and Matt parted, not by choice, but posse pressure, deciding it may be best that way. In 1894 Cassidy was caught and sentenced to two years in the Rawlings prison of Wyoming, July 15, 1894. He was released January 19, 1896. Records of Butch's interview with the Governor of Wyoming states that the Governor said, "You can't help liking that rascal." Upon his release he



INCREASE YOUR INCOME—FIX GUNS

Turn your hobby into profit. Learn the professional way-at home, in spare time.

EARN AS YOU LEARN

City_

We show you how-tell you what to charge, how to get business-where to buy needed parts whole-

SET UP YOUR OWN BUSINESS—AT HOME

Limited space needed. A den, kitchen, basement, etc., will do. Age no barrier to success.

APPROVED FOR VETERANS

Send name, address, 10¢ today for book, full facts

MODERN GUN REPAIR SCHOOL Dept 1914 Twenty E. First Ave., Scottsdale, Ariz. 85251 Enclosing 10¢. Send book, complete details.

Name	_
Address	4

State



For sale in each issue: OVER 1500 ANTIQUE For sale in each issue: OVER 1500 ANTIQUE MUSKETS, RIFLES, pistols, swords, as well as early military equipment, western and nautical gear from all over the world.

TWO NEW EXCITING CATALOGUES EACH YEAR

Each 84 Pages, Illustrated ISSUED SEMI-ANNUALLY:
ONLY \$2.00 YR.
ALL NEW 100 page
CATALOG OF ARMS BOOKS
Nothing Like It Anywhere!

800 TITLES AVAILABLE: antique/modern military equipment, ammo, gunsmithing, shooting. Each reviewed, 25c or free to Antiques Cataloque Subscribers

N. FLAYDERMAN & CO., INC. 4 Squash Hollow, New Milford, Co.



PRIDE OF DENMARK

Stainless steel. For camping, hunting, fishing. Rosewood handle. Excellent balance. Leather sheath included. Accepted by Danish Boy Scouts. Satisfaction guaranteed.

Only \$7.

Mail check or money order — today!

PANTHER KNIFE

516 Fifth Ave., New York, N.Y. 10036



KNIFE MAKING SECRETS EXPOSED

Blackie Sewell tells all in his fascinating, fully illustrated book, "How to Make Custom Knives". There are over 50 photos of the actual knife making process. Complete easy to follow instructions on blade making and heat treating metals. Send \$5.00 (and book will be sent postpaid) to Blackie Sewell, Box GM, 74 Old Alabama St., Underground Atlanta, Georgia 30303



First Choice of Champion Shooters the World Over.

Precision-carved to fit your hand pattern. Our stocks are made for all Target Shooters, Law Enforcement officers and Sportsmen. (Dealers Inquiries Invited—Send 50c For Color Brochure, Refunded With First Order.)



CLOYCE'S GUN STOCKS

Twin Falls, Idaha 83301 Box 1133

TIFETYME PISTOL CARTRIDGE DIES

USERS REPORT OVER 1,000,000 GUARANTEED FOR 200,000 LONG LIFE - NO SCRATCHING - NO GALLING

Carbide Die & Mifg. Co.
CEMENTED CARBOLOY (TRADE MARK)

P. O. BOX 226

COVINA, CALIF.



CATALOG #8 (1971)

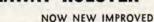
Revised and expanded catalog of muzzleloading cannans from miniature through full scale.

\$1.00

BARNEY'S CANNONS, INC. 61650 OAK ROAD SOUTH BEND, IND. 46614

Still the Leader After 15 Years! Endorsed by use by 50,000 Law Officers.

HIDEAWAY HOLSTER®



at no increase in Price!



Dept. G.1, P. O. Drawer 1712 Brownsville, Tex. 78520 headed for Matt in the Diamond Mountains of Utah. Here he learned of the demise of the McCarty gang in a Delta, Colorado bank holdup. Much of the same type of ending as the James gang realized in Northfield, Minnesota, or the Daltons in Coffeville, Kansas. Tom McCarty was the only survivor to escape being killed in the street by a buffalo hunter.

Matt was arrested in 1896 by a tenacious posse for the Ellensburg bank holdup. He was held three months in the Ellensburg jail, then released after a stormy trial of paid and bought-off witnesses to the amount of \$41,000. As Matt said, "everybody knew I was guilty, including me." After leaving the Ellensburg jail, Matt was sent for by a Henry Coleman, a Vernal, Utah promoter who needed a hired gun. He retained the services of Matt and Bill Wall to provide protection while he moved his mining camp from the Uintah Mountains to the Diamond Mountains, Apparently Coleman was being sought by a Dave Milton, Ike Stauton, and Dick Stauton for stealing their father's mine in Deadwood. (Interesting how far and wide the people of vestervear traveled with their poor modes of transportation.) High on the Uintahs the shootout occurred and Milton and Stauton were dead and Ike Stauton badly crippled for life. Shortly after, Matt and Wall were arrested in Charley Crauses' saloon in Vernal, Utah, Trial was in Ogden because of lynch threats in Vernal. Warner sent a message to Butch to send funds for a good lawyer as he was "scared stiff." The lawyers, John Davis, Orlando W. Powers, and D. N. Straup of Rock Springs, Wyoming appeared, all fees paid in advance. Plea was self defense-but past records didn't help. Warner was found guilty along with Wall and sentenced to the Utah Penitentiary for five years, September 21, 1896. Matt served three years and four months and at the age of 35 was released and pardoned by the Utah Governor, Heber Wells. Governor Wells received a promise from Matt that he would go straight. Governor Wells gave Warner \$150 to find Butch and bring him in for a talk. Warner agreed, but before he could find Butch it was too late. Butch's gang had robbed the Winnemucca Bank of \$15,000 making Matt's mission useless. In visiting with Matt's daughters, it was learned that Matt was convinced that Butch was killed in South America with the Sundance Kid and his brother-in-law, Tom McCarty was the loser of a gun battle at Bitter Root, Montana. No proof has ever been established on these two points, but Matt certainly had the advantage of contacts who probably knew many things not on record.

While Matt was in the penitentiary a startling event occurred in sleepy little Levan which involved Andrew Hendrickson (Matt's original cause of becoming an outlaw). The Deseret News, one of Utah's most outstanding newspapers, printed the story on July 25, 1898 blaming Matt Warner for the death of one of Levan's most beloved citizens, a William Tunbridge, During the usual July 24th parade (a date celebrated by most Mormon communities commemorating the day the pioneers came into Utah Valley) Mr. William Tunbridge dressed in a Mormon Battalion uniform, was leading the parade and waving a saber borrowed from Andrew Hendrickson, Hendrickson was chosen as a rear guard for the five-float parade which had more participants than spectators. Witnesses (three still living) recall how upon the parade's completion, Andrew advanced toward Tunbridge, who was busily accepting compliments for such an outstanding affair. Hendrickson, in a typical pioneer costume, leveled a 10-gauge double at Tunbridge, rendering a fatal blastreasons unknown as Tunbridge and Hendrickson were fast friends. Andrew escaped being lynched but was tried and committed to the State asylum for reasons of insanity caused by Matt Warner's beating of some 20 years past.

After Matt's release, January of 1900, he came to Levan, visited with relatives and friends. During his short visit he dug out the old Colt six-shooter that had been hidden in a grainery, stated that this was his favorite gun and he would not have need for it. He left it with the John Christianson family and rode on south to Price, Utah.

Matt married, raised a fine family, one son and two daughters. He became a Justice of the Peace, saloon operator, night policeman, and was deputy sheriff for many years. He ran for sheriff of Carbon County, Utah using the name Willard E. Christianson—no one knew who that was so he lost the election. Utah records show that on December 4, 1914, he changed his name legally to Matt Warner.

Matt was well-respected and loved by all for many years in the City of Price. His daughter, Joyce, still residing in Price, has a final message written by Matt just prior to his death on December 21, 1938 which states: "If in relating my experiences as an outlaw I'm able to convince but one potential criminal that crime doesn't pay and be instrumental in influencing him to become a law-abiding citizen, I shall feel that my life has not been lived in vain."

CASED HISTORY FOR THE COLT PISTOL

(Continued from page 25)

lined design and ratchet-type loading

A radically new type of five-shot cylinder was standard for this model; it was semi-fluted. While the same .36 caliber as the Navy pistols, the chambers of the Police pistol have a smaller powder capacity and lighter conical balls were used.

pproximately 460 processes were A pproximately to provide the manufacture of involved in the manufacture of Colt percussion pistols. Through the years of their manufacture almost a million were produced. They were efficient when in current use and highly valued now in museums and private collections.

Great changes came out of the War between the States. Arms employing metallic catridges made by New Haven Arms Co. (Henry's patent), Spencer, Brunside, Smith & Wesson and others foreshadowed the trend away from percussion arms.

F. Alexander Thuer of Colt's patented a method of converting a caplock pistol to a cartridge model in 1868, and this was closely followed by the 1871 patent of C. B. Richards and that of W. Mason in 1872. All these patents were devoted to methods for converting the basic Colt cap and ball pistols to shoot metallic cartridges.

By 1872, however, Colt engineers and designers had come up with pistols specifically designed for metallic cartridges. There were .41 caliber derringers, a four-shot "Cloverleaf" revolver and a small seven-shot .22 rimfire revolver. A series of studtrigger rimfire pistols in .22, .30, .32, .38 and .41 calibers called "New Line" models followed soon thereafter. The big news came in 1873 with introduction of Colt's Single Action Army revolver, an exceedingly popular model of which production continues to the present. It is claimed that this pistol has been produced in 36 different calibers. If they didn't have this pistol the TV producers would have quite a problem producing westerns!

When the metallic cartridge gained ascendency over the powder and ball percussion system, the casing of pistols began to decline. All the loading components were now neatly wrapped up in a brass or copper shell. It was no longer necessary to keep with the pistol a powder flask, caps, balls, etc. The cartridges could be purchased all ready to be slipped quickly into the chamber of your gun. The golden age of cased Colt pistols quickly became a thing of the past. Some nice casings for special presentations extended into the cartridge period, but they are few

High costs of special treatments and "extras" today discourage personalized work. Although arms are now attractive and efficient, they are turned out in cheap containers like peas in a pod. Instead of being kept in a nice case, they end up in a bureau drawer, a shooting box, or other rather drab surroundings. Perhaps it is well that Samuel Colt lived in another time. It is doubtful that he would have taken much pleasure from seeing his arms wrapped up in waxed paper and shipped out in an unimpressive cardboard box.

olt was a man with artistic tastes. Colt was a man was among His home "Armsmear" was among the notable mansions of the day. Even his personal cane, which it is this writer's good fortune to own, had nothing ordinary about it. The head is of carved ivory, the shaft itself one piece of ivory stained brown; his name is inlaid in gold on a metal collar.

Always sensitive to eye appeal, Samuel Colt led the way in American pistol casing, and in the process has been responsible for the preservation of many historic specimens of his arms that might otherwise have been lost or destroyed.







FFL Dealers: Write for Bargain Lists on Surplus Military Firearms and Ammo.

CENTURY ARMS, INC. Dept. G

St. Albans, Vermont 05478

NEW beauty at a thrifty price. Handstamped basket-weave design. Handmolded fit. Popular open end holster. Satisfaction guaranteed. For revolvers & auto. No. 1CB For revolvers & auto-matics, as illustrated. \$8.95 Matching basket weave belt with 25 cartridge loops, \$10.95 CHALLENGER

HOLSTER BY Jawrence

At Your Dealer or By Mail FREE 20-page catalog, holsters, scab-bards, belts, cartridge cases, belt slides

THE GEORGE LAWRENCE CO. Dept. G-4 PORTLAND, OREGON 97204

FREE Outdoor Catalog

Save money on outdoor clothing, tents, packs, hunting, fishing equipment, Gov't surplus, etc. 48 pages, fully illustrated. Merchandise sold on money-back guarantee. Write for FREE copy

P & S SALES Dept. GM-4 P.O. Box 45095 Tulsa, Oklahama 7

Tulsa, Oklahoma 74145





Build Your Own

It's EASY! With Gunberth® Plans & Kits All details on Plans, Kits and Hardware for 35 Models are listed in NEW, 80 PAGE. "Handbook"—Catalog, ...illustrated in Color! Also contains tibs on best design.

Send NOW! Only \$2.45 ppd., (For Air Mail, add 55¢ extra)

Coladonato Bros. G-41 Hazleton, Pa. 18201











SET OF FIVE: A STUDY IN CRAFTSMANSHIP

(Continued from page 43)

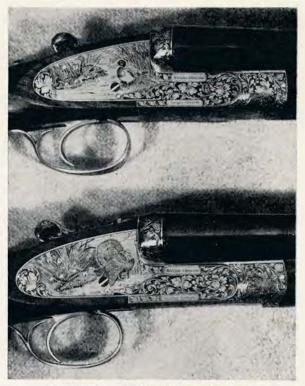
walnut stocks made from wood from a walnut tree cut in a valley in northwest Persia and are almost perfectly matched. They are of a pale color with the unusual rippling figure of fine lines accompanied by what is known as "fiddle back." So perfectly matched is the wood on all the guns, that they can be arranged side-byside so as to match one line of grain with the gun next to it and produce a flowing effect throughout all five.

The engraving was done by Ken-

matched on all sides. The cabinet is lighted by concealed lights and it is fitted with a burglar alarm in an attempt to keep everyone honest.

The 1970 Set of Five would make an ideal gift for the shooting sportsman. Any loving wife would be justly proud to produce this handsome set for her nimrod husband for his birthday, Christmas or wedding anniversary.

The price in Britain is 23,000 pounds, which computes roughly to \$55,000. But, this does not include



Engraving on the 12 gauge gun.

neth Hunt, one of the finest in the trade in all England. The game scenes and scroll work on the actions and lockplates are taken from pictures by Archibold Thorburn, the great British wildlife artist. Among the unusual birds in the engravings are Bob White Quail and Mourning Doves (on the 28 gauge), but there are the more familiar pheasants, mallard, grouse, black game, partridge, teal, wood pigeon, snipe and woodcock.

The rosewood veneer used in the cabinet is also nearly perfectly

import duties and taxes imposed by the United States upon entry. The guns have been sold, however, to a sportsman in Pittsburgh, Pennsylvania who prefers to remain anonymous for the moment. Perhaps he is presenting the Set of Five to his devoted wife or son. Then again, he may just want to cherish the Set as a memento of the gunmakers art and keep it for himself. The real truth will, no doubt, remain guarded until he is overcome by the urge to spin a gun-man's tale.

HUNTER'S NOTEBOOK: ZUKUNFTSHIRSCH (GERMAN STAG)

(Continued from page 51)

application to the local S5 hunting and fishing registrar. But there is one hitch. While you might be eligible, there is no assurance of getting a hunt. There's usually another hundred hopefuls ahead of you, all vying for the 4 or 5 trophy hirsch that make up the American quota. So hunts being granted on a first come, first served basis, the chances of hunting a 1A hirsch, much less shooting one, are pretty slim. In my particular case, I had waited 10 years. So I had to make this shot count. There might never be another chance.

The 14 pointer was now about 75 yards away from us, trotting back and forth in the clearing, grunting like an old boar on the prod. Milling around him were some 30 head of cows he had cut out of the herd earlier. The rest of the "stuck" were beginning to string out over the basin. Off to my right was a large fenced-in area where the red deer were fed an assortment of hay, beets, orange peels and meal cakes during the severe winter months. I could just barely make out the small cement silos where the mash was kept, the wooden havracks, and the barn where the hav was stored, I noticed my breathing returning to normal.

Then I did a foolish thing! Instead of shooting the hirsch when I had the chance, I delayed firing until he got inside the wired enclosure, and was then cut off from us. I didn't dare risk a shot for fear the bullet would be deflected by the heavy mesh.

"Sacrament!" blurted out Herr Lupperger. His face glowing with anger. "See what you've done!"

But he had the presence of mind to do something that I never would have thought of. Cupping his hands to his mouth, he let out a roar, which brought the stag charging back toward us.

The stag wasn't over 75 yards from us now, bellowing with savage rage. I decided he was going to take some killing. So I called on an old jaeger trick. I waited until the hirsch roared again, then drove a bullet into his lungs. It worked like a charm. The stag dropped like he was pole-axed.

When we both got up to him, he was still breathing heavily, trying hard to get his head around to rake us with his antlers. I administered the

coupe de grace—a second shot right behind the base of the skull. It killed him instantly. Then we quickly dressed him out in the dark, stuck a piece of paper into the chest cavity to keep away the foxes, and left him lay until we could haul him out in the morning.



Typical German hunter with dogs.

That night at Herr Lupperger's house we got literally plastered "drinking the hirsch dead." An ancient German hunting custom that can leave the hunter more dead than the victim. But next morning, bright and early, I returned to Fall with my family and some friends to help transport the hirsch back to the Forstamt. I forget what he weighed, but it took five hefty men to slide the stag into a jeep trailer, and still his legs and head hung over the sides. He was a tremendous animal. What really caught my eye, though, were the dried blood stains on the tips of his massive crowns. And with Old Peter not showing up at the mating grounds, Herr Lupperger could only guess that his fierce gladiator had done what we had started out to do-dethroned Old

But he'd made the same mistake of running off the "Zukunftshirsch," and for this unforgiveable sin, I ended up with a prize far better than Old Peter. And to go one better, the best stag taken by an American in Fall during the past decade.
"Waidmannsheil!"



P. O. BOX 3545 Chula Vista, California 92011







Mershon's new "Imperial" smooth side recoil pad is the latest addition to the family of the popular "White Line" recoil pads. The beautiful small diamond pattern will enhance the appearance of any shotgun or rifle. Price \$6.50



Newly engineered patented design progressively absorbs more recoil. no bottoming out. Molded of oil resistant Du Pont Neoprene. Stays flexible in coldest weather. A model for every type gun. Insist on *White Line* lifetime recoil pads. Deluxe shown, \$4.40 List.

MERSHON COMPANY

1230 SOUTH GRAND AVENUE + LOS ANGELES, CALIF 90015 Dept. G-4

CONETROL announces a two-piece mount base for the new bolt action Ithacagun with dovetailed receiver. The base is projectionless, as are all Conetrol mounts, and attaches to the LSA-55 action without drilling or tapping. By tightening the flat-head cross clamp screws, extremely rigid mounting on the integral dovetails of the receiver is assured. The



tighter the screws are driven, the more solid the mounting. Base is available in the three Conetrol lines—Huntur, Gunnur, and Custum. Prices are \$9.95, \$12.95 and \$14.95 respectively. Rings—low, medium and high are extra and come in all three lines. For more information, write Conetrol Scope Mounts, Dept. G-4, Seguin, Texas.

EMPLOYING an exclusive aging process for the natural coloring, Earl T. Cureton duplicates the light brownish patina of a very early original powder horn to such a degree that his powder horns are difficult to tell from the real ones. These horns have to be seen to be believed! They are extremely well made, appropriately decorated, and the heavy tips thinned down to reduce weight. Each end plug is expertly hand fitted and made of the finest hard woods. Beautiful enough for decorator purposes but completely functional for the shooter. Acclaimed by some of the most renowned black powder shooters as some of the best on the market. Prices range from \$8.95 to \$26.95 depending upon size. From Earl T. Cureton, Dept. G-4, 7017 Pine Grove Road, Route 6, Knoxville, Tenn. 37914



Shown with the Cureton Powder Horn is the Centennial Percussion Kentucky rifle that is available in either flintlock or percussion. Overall length is 50 inches and the rifle has an octagonal barrel 36 inches in length. Case hardened finish, walnut stock. Brass patch box with light engraving. These rifles would make excellent additions to any collection and are fine shooters. The popular .44 caliber is great for targets or hunting. For more information write Centennial Arms Corp., Dept. G-4, 3318 W. Devon Ave., Lincolnwood, Illinois 60645

SHOPPING Guns

IDEAL FOR gun collectors and the outdoorsmen. This handsome, lightweight, but rugged mineral/metal detector was designed and developed by White's Electronics. The Goldmaster 66TR incorporates the solid state transmitter receiver circuit. Equipped with a sensitivity meter, range control, mineral/metal tuner, built in battery check and speaker, volume control and phone jack plus two multi-coil loops for maximum performance in depth and detection. This model



sells for \$269.50 FOB Sweet Home, Ore. The 66TR will detect a gold, silver, or copper nugget half the size of a grain of corn. It will locate lost or hidden guns, bullets, knives, anything made of metal. For more information on the Goldmaster 66Tr write to White's Electronics, Inc., Dept. GMR, 1011 Pleasant Valley Road, Sweet Home, Oregon 97386

SMALL game falls to the deadly Wrist Rocket, the manufacturers claim. Braced on the wrist, the patented slingshot propels its charge accurately at 232 feet per



second. Range is 225 yards. For more information write Wrist Rocket, Dept. G-4, P.O. Box 21-G, Columbus, Nebraska

THOMPSON/CENTER is now delivering the fabulous new Hawken rifles that were shown in prototype form early in 1970. Similar to the famous Rocky Mountain rifles made during the early eighteen hundreds, the Hawken is intended for serious shooting. Button rifled for precision, it is available in either .45 or .50 caliber. It features a hooked breech, double set triggers, first grade American walnut, adjustable hunting sights,



solid brass trim, and beautifully engraved and color case hardened lock. It captures the romance of the original. Made in America to American standards. In either caliber, retail is \$175.00. For more information, write Thompson Center Arms Co., Dept. G-4, Rochester, New Hampshire 03867

IF YOU like reproduction miniatures, you'll like these from Spain. Four models are offered by Terry Roberts. A Spainish Blunderbuss with the flint system and Miquelette saddle bow from the 17th and 18th century and a barrel length of 475 mm sells for \$35.00. Solid wood construction with highly polished brass fittings. Prices vary according to the



size and weight. Also offered is a French holster pistol with a barrel length of 225 mm and a firing system of flint and English key saddle bow. Dates from the 3rd part of the 17th century. For complete information on these fine reproductions, write Terry Roberts, 340 East 57th St., Dept. G-4, New York, N.Y. 10029

SHOPPING Guns

BE A GOVT. hunter, game warden, forester. 3 free guides reveal plan to prepare men ages 17 up for vacation career in Wildlife-Forestry Conservation. Adventure, thrills, public service, plus good



pay, low living cost, security. Write for free guides. North American School of Conservation, Dept. 63001, University Plaza, Campus Drive, Newport, California 92660

NEW from Lee Custom Engineering is the Lee Target Model Loader. Now anyone can reload true target quality ammunition at less than the cost of a conventional loading press. Tolerances are said to be 5 to 10 times closer than the best conventional reloading dies. Equipment is supplied in this kit for every step of



the reloading process. Everything you need to turn out target quality ammo is here in this handy kit that you can take right to the range with you. Comes fitted in a wood grained box with factory sealed contents. Retail is \$24.95 complete. For more information write Lee Custom Engineering, Dept. G-4, Hartford, Wisconsin 53027

TARANTELLA of Walsall have produced a completely new shooting glove with a "slip finger," enabling the shooter to expose or cover the trigger finger as required. Known as "Trueshot" the glove gives good grip, cool hands and protection from hot barrels. The glove is designed to meet the needs of the shooting man for hunting, clay pigeon shooting



and rifle and pistol shooting. Elastic wrist and Velcro touch fastening give snug, flat fitting and allow for varying wrist sizes. The winter model combines all of the above features, plus woolen cuffs and silk linings for extra warmth. More information is available from Vilem B. Haan, Inc., Dept. G-4, 10305-07 Santa Monica Blvd., West Los Angeles, Calif. 90025

ELIMINATE all of the guess work of initial telescopic sight alignment. A midrange trajectory chart, along with instructions are furnished. Each instrument is preset at exact zero on a special collimator at our service center to assure



100% accuracy. Complete with .22 and .30 caliber studs. \$19.95. Extra studs available. Order direct or send for free catalog. Address Dept. L, Herter's Inc., Waseca, Minn. 56093

THIS extraordinary set of four 14 oz. glasses glamorize every drinking occasion. Each glass is encased in a leather-like saddle stitched removable coaster. Full depth antiqued metal pistol replicas (each different) are emblazoned on the sides. This is the perfect masculine gift



for him, that she will also be proud to show and use. Set of four 14 oz., 4 inch high glasses for only \$11.99 postpaid. Satisfaction Guaranteed. Drews House Dept. G-4, 6642 Rd. Island, Hammond, Indiana 46323

CLUB emblems with your club name embroidered in striking colors are now available from Eastern Emblem Corp. Great for identification, club membership or fund raising. They can also manufacture any design you might require in small or large orders. Write for the free catalog packed with emblem ideas. Identify your club and be proud of it. Eastern Emblem Corp., Dept. G-4, P.O. Box 628, Union City, New Jersey 07087

NOW you can observe, photograph and hunt without your subject being aware of your presence. Animals, spiders, bugs and all night prowlers cannot detect this light. Only by using the Invisible Red Headlight with 12 volt battery and fader control to adjust brightness can you be assured animals will not detect the light; If you do not have the light, animals eyes cannot be picked up at a great distance. With the light, animals eyes can be spotted as far as 300 yards but must



gradually be turned all the way down as animal comes in closer. Comes packaged with study battery carrier with pocket for fader control. Easy to operate at waist, never having to reach above face. Battery carrier fits any size belt. Light works off any dry cell 12 volt lantern battery such as Ray-O-Vac #926 or Everready #732. \$9.80 Battery not included. A-1 Sporting Goods Mfg., Dept. G-4, P.O. Box 6252, Ft. Worth, Texas 76115

Panel of Experts

 Each question should be sent directly to the panel member best suited to solve your problem. Mail questions directly to the expert at the address shown below.

Each question—only one question per letter, please—must be accompanied by a self-addressed stamped envelope and \$1.00.

You will receive the answer to your question directly from the expert. Our panel will select the most interesting questions for publication in this column, but you don't have to wait for the magazine to get your answer.

Letters with questions which do not have \$1.00 will be disregarded; those without a self-addressed envelope will be answered in

the magazine, and not directly.

We have enlarged the staff of our Panel of Experts to give you the best possible service on your questions. Remember, write directly to the expert at the address below—do not send questions to GUNS Magazine—and be sure to include the \$1.00 and the self addressed envelope.

Robert Mandel—Antique Arms
P.O. Box 499, Wilmette, Ill. 60091
Shelley Braverman—Modern Arms; Forensic ballistics
Dept. Q, Athens, New York 12015
William Schumaker—Gunsmithing
208 W. Fifth, Dept. Q, Colville, Washington 99114
Les Bowman—Hunting
Box 286, Bountiful, Utah 84010
Maj. George C. Nonte—Handloading
P.O. Box 3302, Dept. Q, Peoria, Illinois 61614
George E. Virgines—Fast Draw
P.O. Box 2014, Northlake, Illinois 60614
Maj. R. O. Ackerman—Black Powder Shooting
9627 Arvada Ave. NE, Dept. Q, Albuquerque, New Mexico 87112
Dick Miller—Trap & Skeet

Casa Correo Sta., P.O. Box 21276, Dept. Q, Concord, Calif. 95421

Barrel Length

I have a Remington .30-06 Model 742 with an 18½ barrel. I use this for my brush hunting.

I also have a Model 70 Winchester rechambered for the .300 Weatherby cartridges. This rifle has the original 26 inch barrel on it.

If I go on a pack trip is it necessary to get the rifle barrel cut back to 24".

> Edward A. Langer Raymond, Washington

So far as a saddle scabbard is concerned, you do not need the barrel of your rifle cut to 24". Just make sure that you have a scabbard long enough for the barrel in question. In our pack outfit in Wyoming we had 30 or more scabbards and many were in 26" length for those who had such rifles. I'd suggest you write to Eubanks Saddle Co., Boise, Idaho and ask them for their catalogue which gives prices and data on their very fine, yet low-cost gun scabbards. Get one with a flap that snaps closed over the rear of the scope and bolt. It keeps the dirt and rain out and holds the rifle solidly in the scabbard. Mount it with butt to the front under the left leg and make sure the butt is no higher than the horse's neck on top.—L.B.

Which to Buy?

Several members of our gun club have started shooting replica pistols. I would like to buy one but I have heard that a lot of them are not safe. The model I like is the Remington 1858. I would like to know if .44 cal. or .36 cal. is most accurate for target and which you think is the best made and accurate.

Ralph Ernst Absecon, N. J.

I personally like a .36 better, but I'll have to admit if the slightest breeze springs up, the .44 will have the advantage from there on in. So, I carry a .36 for fun plinking, and use a .44 for matches. I have not been given the opportunity to test many of the different makes, but I shoot a .44 M1858 Remington replica made by Navy Arms Co., 689 Bergen Blvd., Ridgefield, New Jersey 07657. This was my favorite several years back when I did exhibition shooting with

muzzle loading arms. This should indicate that I put my faith in it.—R.O.A.

Arvo Ojala

I find I have been kicking myself ever since I let a friend convince me I should sell him my Ojala rig, and continue using a "Woolem" style a friend made for me.

I was wondering if one of your club members might have one to fit my 5½" Frontier. (44" gut, sorry about that) I am not concerned with carving, etc., just wanted a nice rig. In lieu of no used ones laying around, perhaps you could advise me if Ojala is still in business.

John M. Dodson Quincy, Ill.

You might contact these two dealers; Blue Island Gun Shop, 3026 W. 127th St., Blue Island, Ill. 60606, Telephone—312-FU-5-2415. Oak Lawn Guns, 9618 Southwest Hwy., Oak Lawn, Ill. 60638, Telephone-312-GA-3-0130, or Arva Ojala Holsters, 4209 Lankershim Blvd. North Hollywood, Calif. 91602.

You might also contact Clark H. Crussell, Secretary, Western Fast Draw Assn., 21822 Ocean Ave., Torrance, Calif. 90503. This association puts out a monthly newsletter on news of the sport.—G.E.V.

Which Scope?

What telescopic sight and mount do you recommend for the Ithaca Model 49 Saddlegun in the Martini single shot?

Marvin T. Tong Bay Cith Mich.

The Ithaca Gun Co., Inc., Ithaca, New York, 14850, has in the past manufactured an N-type all steel side mount with 34" rings for mounting .22 scopes on the M-49 saddlegun. Since the Weaver Scope Company has discontinued their 3/4" tube 22 scopes you will have to go to some of the other imported makes for this mount, which I think is still available. The Ithaca Company can give you the latest information on this. I am hoping that someone will make 7/8" side mounts for the new Weaver 1/8" tube .22 scopes. There are still many older .22 rifles in use, and some of these will not accept a top-mounted .22 scope.-W.S.

Safe .45-70's

I recently became owner of a Marlin 1881, .45-70 and a Springfield 1884 Trapdoor in the same caliber. Both weapons are in excellent condition.

A shooting friend advised me that it was perfectly safe to buy and fire modern .45-70 off the shelf ammo,

since all cartridge companies loaded for the weakest actions.

Somehow, I question this, and not wishing to lose my head, so to speak, over an antique weapon, so I seek an expert's advice.

I hope to use either or both of these old cannons on local whitetail, and if modern ammo is in fact safe, my problem is solved; if not, could you recommend a handload that would do the trick?

Robert Higgins Chicago, Ill.

Let me set your mind at ease concerning the use of standard, factoryloaded .45-70 cartridges in both your Springfield 1884 and Mariln M1881. Standard SAAMI (Sporting Arms and Ammunition Manufactures Institute) pressure and velocity specifications for this cartridge were established at a low level specifically to permit use of such ammunition in the older guns, particularly the "Trapdoor" Springfield. For this reason, today's 45-70 cartridges are greatly underloaded by modern standards. You need have no fear whatsoever of using factory loads in both guns.

As for handloading, a very excellent load consists of the Hornady 350 grain SJ jacketed soft point and 22 grains of Hercules 2400 powder. This load will actually produce expansion, though less penetration, than the factory soft point load.—G.N.

ML Choice

I have been wanting to buy a percussion revolver, but I've found so many different ones, I'm confused. People tell me some fire two cylinders at once and the ones made in Italy are fine shooting and trouble free, but who knows?

I have considered a .36 caliber and have wondered about bullet molds, etc.

L. L. Reynolds National City, Calif.

I know what you mean about being confused by quantity. There are suddenly a great number of cheaper percussion revolvers on the market. As a result, the better companies are bringing their prices down. This much is good, as long as quality does not suffer in order to do it. To answer your questions, any such revolver can have several chambers go off at once. This is no reflection upon the quality of the gun, but is due to careless loading techniques. After loading fill mouths of cylinder chambers with cup grease or Crisco or similar grease. Make sure nipple cones are not over-length, and that caps fit them properly. With both ends taken care (Continued on next page)

WORKS LIKE A CAN OF HAIR SPRAY WEARS OFF IN Against Personal Attack 15-30 MINUTES A pocket model of for Yourself, Wife and Family same chemical on the street, at home and traveling used by police. Now! Personal protection that's truly effective and truly safe. (Protector is the pocket model of the world famous chemical weapon carried by more than 200,000 policemen.) Renders an assailant helpless – yet the effects wear off in 15-30 minutes with no permanent or long-lasting injury! No danger to user or bystander. Completely nonflammable and non-toxic. Not an "irritant" under Federal Hazardous Substances Labeling Act. MIDDLE WEST MARKETING CO. 216 South Hoyne Avenue Chicago, Illinois 60612 NAME. Please send me: ADDRESS. 1 Protector \$3.95 3 Protectors \$10.00 Not intended CITY_ STATE

Street Number only, no P.O. Boxes

prohibited by law



Revolutionary internal design never before used in any blow back type rifle. Its smooth chambering action and easy trigger pull puts the COMMANDO MARK III in a class all by itself. Guaranteed to out perform all other 45 caliber carbines. Money back guarantee if returned within 5 days after receiving if in same condition as delivered and postage prepaid. No special license or registration needed. Classified by the U.S. Gov. as a legal semi-automatic weapon. All inquiries will be forwarded to your local dealer. Dealers please send copy of FFL license when inquiring about dealer discounts. Write or phone

COMMANDO ARMS, inc.

P. O. Box 10214, Knoxville, Tenn. 37919 Ph. 615-523-3393

New reference catalog

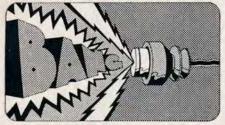
Large detailed line drawings of hundreds of pistols, plus descriptive data and estimated values. 72 pages, 8½"x11". Included are prices and illustrations of magazines and gun parts, many of which have never been available.

Shipping charges prepaid. Send Check or M.O.

Send only \$1 for this valuable catalog. Full price refunded with first purchase.

90	TRIPLE K MFG. CO. Dept. B 568 Sixth Ave. San Diego, Calif. 92101
Name	send catalog-reference book. \$1 enclosed.
Addre	ss
City_	
State,	Zip

PROTECT YOUR HEARING



STOP FLINCHING IMPROVE SCORING

Sonic Ear Valvs, the only mechanical hearing protector, stop the Bang! before it harms your hearing. You can still hear normal conversation. Comfortable, protects without plugging. Just \$4.95 per pair, postpaid. Money back guarantee. Order now. Sigma Engineering Co., Dept. 6, 11320 Burbank Blyd., No. Hollywood, Calif. 91601

SONIC car valvs







BUBINGA

(African Rosewood)
Exotic Pale Reddish Stocks

Paulsen Gunstocks, Chinook, Mont. 59523



of, you should not have multiple firing. But take precaution anyway to keep muzzle in safe direction, etc. Of the three popular calibers, .31 is not too practical, but I like either .36 or .44. The .44 is best for matches due to better wind bucking, but I prefer the .36 for a light belt gun for snakes, plinking, etc. Some good guns are made in Italy and some pretty horrible ones. You get pretty much just what you pay for.

Send a buck for a catalog to Dixie Gun Works, Union City, Tenn. 38261. It has all the info in it that anyone needs. The .36 replicas take a .375 round ball. Get a mould from Lyman Gunsight corporation and you'll have the best. 24 grains of FFFg powder is a good load, for .36. Cap size depends upon what gun you buy. You'll have to experiment.—R.O.A.

Danish Rolling Block

I recently picked up a Grade 1A Rolling Black Rifle. It is a 11.7mm x 51R Danish 1867.

I would like to shoot it. Could you tell me where I can get ammunition or cases. I would prefer unprimed cases but will settle for anything I can use.

Leo C. Nault Griffith, Ind.

The Danish 11.7 x 51R M1867 cartridge is quite similar to, but not interchangeable with, the U.S. .45-70.

At the time this rifle was sold in quantity in this country, substantial quantities of ammunition and unprimed cases were also sold. You might be able to obtain cases by running a Want Ad in some of the shooting publications such as Shotgun News. However, all is not lost. Though undersize at the rear, the .45-70 case may be used after shortening to a length of 2.00 inches. The case is about .100-.015 inch undersize just ahead of the rim and will expand upon initial firing to fill the chamber at that point. To keep this expansion concentric and to reduce the possibility of a split case, wrap a 1/16-3/32-inch wide band of scotch tape round the case just ahead of the rim, making the wrapping thick enough so that it will barely enter the chamber, thereby keeping the case centered in the chamber. A better case of the proper head diameter may be formed from C.I.L. 11mm (.43 Mauser) brass. In this case, the rim thickness may require some reduction to permit the breech block to close fully. The case is then shortened as already indicated, then the neck expanded to take the proper bullets.

Correct bullet diameter is .455 inches, and conventional .45-70 bullets

may be so sized for this cartridge. As for loading data, simply use standard .45-70 powder charges and bullet weights. The Lyman 405 grain cast lead bullet and 22.0 grains of Hercules 2400 Powder should work quite well and will probably slightly exceed the ballistics of the original Danish load (387 grain lead bullet at 1345 fps.)—G.N.

L. C. Smith Drilling

Can you enlighten me on this gun: Marked, "L. C. Smith, maker of Baker Guns, Syracuse, N. Y." It has three Damascus barrels, 2 12-gauge and 1 large rifle bore, maybe .45-70. It is an outside or exposed hammer gun of the drilling type.

B. L. Schultz Stillwell, Ind.

Lyman Cornelius Smith started the L. C. Smith Company in 1877 at Syracuse, N. Y. As the Baker combination shotgun and rifle was discontinued in 1880, you can see that they were not manufactured for long. Your gun, of course, is too old to be fired, but certainly should interest collectors, in good condition it might be worth as much as \$60 to \$80.00.—S.B.

Manhattan Navy Model

I have a cap and ball pistol that I would like some information on. The gun has an overall length of .2 in. The barrel length is 6½ in. On the barrel it has: Manhattan Firearms Co. Newark, N. J. Patented March 8, 1864.

On the 5 shot cylinder there is another date which seems to be Dec. 27, 1859, how is this possible?

Richard Galloway Beeville, Texas

Your cap and ball pistol is the Navy Model of .36 caliber manufactured by the Manhattan Firearms Co. of Newark, New Jersey. The construction and design are similar to the Colt Model 1851 which this revolver closely imitated. The Manhattan Firearms Co. is no longer in business but the manufacturer's date of your gun was approximately 1865 and it's collector's value if in excellent condition would be about \$150.00.—R.M.

Colt .476

Please identify and place a value on a D.A. revolver marked as follows: COLT'S PA FA MFG CO HART-FORD CT. U.S.A. DEPOT 14 PALL MALL LONDON. This is in a single line on top of barrel. 476 CAL. on trigger guard. Cylinder has British proof marks on each chamber. Stamped under one grip the figures G 173. Serial number in front of lanyard ring 16965. Barrel length is 5.5 inches. Gun apparently lacks all patent dates.

Condition of firearm NRA excellent. Gun appears to be 1878 Colt.

> G. M. Wildman (Mrs.) Saskatchewan, Canada

Two Colt D.A. revolvers used the 476 Eley cartridge; the Colt DA Army, with its bird head like grip, made in many calibers from .32/20 to .476; and the Colt New Service Revolver, with a square grip in calibers from .38 special to .476. I would guess yours to be Colt DA Army Model as many were made for the London trade in .450, .455 and the .476 English calibers. Collectors value for one in very fine condition should be about \$75 to \$90.—R.M.

1941 Johnson

I recently bought a Johnson semiauto military rifle from a surplus arms dealer here in Canada. Could you tell me to whom these were originally issued or sold. I read somewhere that 50,000 were made for the Netherland Indies Forces. Mine is serial #8102, Model of 1941 and made by Cranston Arms Co., Providence R. I.

> Jim Russell Saskatchewan, Canada

As near as can be determined from the description of your Johnson-M-1941 automatic military rifle, it is one of the lot manufactured for the Netherlands Government and subsequent shipment to the Dutch East Indies.

At one time a large lot of these rifles was imported into this country by Winfield Arms Corp. as military surplus. This was in the early 1950's and the gun has not been available in quantity since.

Unless in unusually fine condition, this model is of no particular interest to collectors. A specimen in near-new condition will bring somewhat in excess of \$100 on the open market.—G.N.

Black Powder Cleaning

I've heard that the kind of cleaning you would give to a cartridge arm is not adequate in a black powder arm. Just how do you clean a black powder gun, or simply as possible?

Damion Pauksta APO, N. Y.

You are quite right that the same method of cleaning will not be correct for a black powder arm. This is due to the fact that the chemical composition of the residues is totally different. Smokeless residues contain no chemical salts-black powder is full of them. Therefore, nothing is more efficient than hot boiling water to clean a black powder gun. The only problem is the necessity to dry thoroughly and

oil. Before shooting the gun the next time, degrease with naptha or something similar. Let dry before firing.—R.O.A.

.38 Overload

Due to that eternal bugaboo of the handloader, carelessness, I recently fired a greatly excessive (probably a double) charge in my light-frame .38 Special revolver. I figure the load consisted of about 5 grains of Bullseye, twice what I intended for the mild wadcutters I was loading. Attempting to extract the fired case normally was useless, and it had to be hammered out with a rod inserted through the front of the cylinder. Since the gun appeared undamaged, I continued to fire it, using low and medium powered loads. Extraction from the chamber that had held the overload continued to be impossible, and inspection of cases fired in it showed the chamber to have been definitely enlarged. Is the gun safe to shoot in it's present condition, and if so, is there any way to remedy the extraction problem short of having a new cylinder fitted?

William P. White Wayne, Pa.

Your "extraction problem" now stems from a chamber enlargement around the front part of the case. This is common with violent overloads, and it locks the case in the chamber to that extent. There is nothing that can be done to cure it, short of having a new cylinder fitted.

It is impossible to say whether or not the gun is safe to shoot. We would have to be able to inspect it.—W.S.

.338 for Whitetails?

I would like your assistance in solving a hunting problem. I am presently using a "Sako Finnbear" .30-06 on Whitetails. I like the handling qualities of the Browning and will try it on Whitetails if the cartridge is suitable. My question is as follows: Is the Browning autoloading rifle in .338 Winchester magnum suitable for hunting Whitetail deer?

R. Davis Brooklyn, N. Y.

Your question needs two answers. First, the Browning Auto-loader is an excellent gun for such shooting. But the next is that though the .338 cartridge is ideal for Grizzly, brown bear, polar bear and moose, I'd draw the low line of animals I'd use it for as elk. It sure will put them down to stay. Even on Elk I feel it's much more powerful than necessary. The .30-06 would be the largest size caliber that I'd recommend for Whitetail deer.—L.B.



...Alaskan style!

322 S. Flower Anchorage, Alaska

Dear Sir:

I am very pleased to send you this letter and my warranty card for a new Laupold 2 x 7. This is the third Laupold scope I have owned. One, an M8-4x, was responsible for sighting in on 3 large Carlbou, a 1400 pound Moose and a Grizzly bear,

All these taken, by the way, under adverse conditions, such as taken out of warm cars and shot in temperatures to —30 degrees, hauled up mountains in the rain, snow, sleet and wind and bounced around. Once, the scope was jammed in a snow bank and I melted off the snow which had frozen on both lenses by pouring hot coffee over them.

I have yet to see a batter performing scope. No fog, over, no parallax, just a sharp, clear picture at all times. Any time your company needs an endorsement, just have them ask me, Thanks a lot for a fine product.

Yours Iruly,

Allen Heam





MODEL 1903: THE SPRINGFIELD RIFLE

(Continued from page 31)

rifles the Woody set trigger was installed. It is extremely doubtful if any of these rifles are in existence today. Possibly one might remain in the NRA arms museum.

A week after Pearl Harbor, the Remington Company accepted a contract to manufacture the '03. The last rifle made by Springfield had been serial number 1,532,878, and when Remington got into the act it was given a block of numbers which commenced with 3,000,000. The gap between the numbers used by Springfield and those by Remington will give a false picture on the total number of Springfields manufactured. The first '03 turned out by Remington was numbered 3,000,001. The company went ahead to make 348,085 units. These were the M1903A1. By May 21, 1942, the company came up with a series of suggestions on how to simplify the manufacture, speed up production and at the same time produce a wholly satisfactory service arm. After some study by the Ordnance Corps, it was decided to go along with the changes which Remington had suggested. On May 21, 1942, the M1903A3 was approved.

This is the rifle which found its way into the hands of many countless thousands of sportsmen after the war. There were alterations to the bolt so that the two, the older M1903A1 and the A3, are not interchangeable. During October of that year a 2-groove barrel was approved. These were stated as sufficiently accurate to be okay for combat but any subsequent owner who acquired an A3 and sporterized it was seldom happy with the accuracy of his 2-groove tube.

A major difference in the new model over the older was the attachment of a really fine rear sight. This was an adjustable aperture mounted on the bridge of the receiver. The sight was movable for elevation in 50-yard increments, adjustable from 200 yards to 800. There was a windage movement which was click-adjustable, one click being worth one minute of angle. In front there was a post type front sight which came in five different heights, these ranged from .477 to .537-inch, and were provided in the various heights to match the rear sight and secure a proper zero.

Some of the stocks had a pistol grip others did not. There was a longer handguard to cover the space on the top of the barrel where the original sight had been mounted. The upper band assembly, lower band and its swivel, together with the trigger guard and magazine assemblies were now all stampings. The extractor collar was also a stamping as well as the buttplate and the magazine follower. The original 1903A1 follower was a machined piece and the two are interchangeable. These, then, were the major changes in the A3 rifle. It cheapened the gun considerably but it did permit greater production. Today the A3, as sporterized, is not conspicuous for its pressed steel parts. And indeed, since WWII, it has become quite common for stampings to be used in many firearms.

There was one more Springfield before the fine old rifle was stacked in the corner. This was the M1903A4, the sniper's rifle. This was essentially the A3 except a scope mount was attached over the receiver. It was attached to the bridge and the receiver ring, a one-piece type which held the Weaver 330C scope. The A4 had no iron sights and could be loaded only one round at a time because of the position of the scope and its mount and there was no bayonet lug. It was adopted in December, 1942.

The Springfield has a striker fall of .6-inch. This normally requires .0057-second to move through its full travel. In these days of speed locks and shortened firing pin movement, the more than one-half inch of striker fall is looked upon with a jaundiced eye. More than forty years ago an attempt was made to speed up the lock time. The cocking head was whittled off the back end of the firing pin and after this was done it was found that the lock had been speeded up to .0048-second. This was a small gain but after trying the headless strikers through a series of national matches it was discovered that the lessened inertia of the pin encouraged ruptured primers and some primer blowbacks. It was decided to go back to the original assembly.

One of the endearing features of the '03 has always been the smoothness of the bolt. It is slick and easy of opera-

tion and for rapid fire has no peer-The change in heat treatment with rifle number 800,000 at Springfield insured an extremely hard bolt which contributed to the frictionless movement, On the first of April, 1927, the Armory changed its heat treatment and at the same time the content of the bolt. It was switched to a nickel steel. This was done to get away from the complicated double heat treatment of the former process, but in making the swap to the somewhat softer nickel steel, some of the easy manipulation of the bolt was lost. The nickel steel tended to be sticky and this got worse in a rapid fire string when both bolt and receiver heated up from the firing.

When Remington commenced to manufacture the M1903 in 1941, they followed the Armory practice of using 31/2% nickel steel, but after a time changed to a chrome-nickel-molybdenum steel with only .20% to .40%

nickel, about one-tenth of what had been used by Springfield. These, as well, were surface carburized, making them exceedingly hard on the outside and because of this quite as smoothly functioning as the old original bolts had been. Rockwell hardness ran from D62 to D70 on these bolts and also on the receivers.

Unquestionably the finest treatment ever given the Springfield was done by Capt. E. C. "Ned" Crossman in his book, "The Book of the Springfield" published by the Small Arms Technical Publishing Co. This is an exhaustive, all-inclusive rundown on the grand old rifle. Crossman, a military man (father of Col. Jim Crossman), knew the rifle from thirty years of intimate acquaintance. Along with this he had an abiding love for the gun and this becomes evident right from the beginning. For the aficionado of the grand old '03, it should be required reading.

DIXIE GUN WORKS: TENNESSEE SUPERMARKET

(Continued from page 35)

company \$10, not knowing price or what they had to sell, and asked them to send me \$10 worth of old locks. In about three months, I got the locks and sold them at the next gun show for \$20. Then I sent that \$20 to the same company and asked for more locks. This kept up until I could afford to order ahead and keep locks in stock." Thus began his foreign parts importation that enables todays shooters to repair old or build new guns. Do you know anyone else who started an import business on a tendollar bill and a stamp?

The contacts developed in that lock-buying project were eventually pursuaded to make parts to Kirkland's orders-and by the late 1950's he was visiting those plants regularly in Europe to keep things rolling. Through those trips he also bought old stocks of original parts and guns wherever they could be found. Dusty crates, undisturbed in warehouses for decades, often yielded manna from heaven for the American muzzleloading buff. Sometimes, though, Turner admits they yielded nothing but junk. But, being no mean trader himself. Turner didn't get stung too often on either old or new goods. Rebel he may be, but Yankee-sharp he is.

Along these lines Kirkland says be feels badly that so few of the old-line Liege gunmaking firms still survive —only four independents in addition to Fabrique Nationale. He attributes this to heavy government subsidization and modernization of Italian and Spanish plants which can consequently produce at much lower costs. This situation has forced many fine old Liege houses out of the gun busi-

Back when he quit his job to go into the gun business full time, Turner Kirkland foresaw the trend that is so strongly obvious today-that hundreds of thousands of people would shoot muzzle loading guns produced abroad, specifically styled and designed for the U.S.A. market. The first was the Dixie Kentucky Rifle he designed to be not a copy of a specific make or model, but a composite of the typical good Kentucky style. In short, it was (is, for it's still in production without change) what Kirkland says ". . . a good Kentucky should look like." In '54 he visited a Belgian plant, spent several days making the pattern rifle right in the factory, then left it to be reproduced in quantity. They did just that-and he's been selling them to black powder enthusiasts ever



NOT FOR USE BY NEW YORK STATE LICENSES WESTBURY SALES CO., D. D. Dept. GK-1-G P.O. Box 434, Westbury, N.Y. 11590







Combines two important advantages in one mount. Provides instant use of open sights and a scope mounted as low as possible on your rifle. For those fast, close in brush shots or spotting, scope can be swung to the side to allow instant use of your iron sights. Don't let fogged lenses or a damaged scope spoil your chance of a kill. The upper rings of the Lo-Swing mount makes detaching The upper rings of the Lo-Swing mount makes detaching your scope easy — ready to replace upon arrival at your hunting site. Unconditionally guaranteed to maintain zero sighting alignment. Lo-Swing top mount \$25.00. Lo-Swing side mount \$20.00. See your favorite dealer. Write for free 16 page product folder.

PACHMAYR GUN WORKS, INC. 1220 30UTH GRAND AVENUE, LOS ANGELES, CALIF, 90015 DEPL. Q-4



Looks and Feels Like Full Size "James Bond" style German Automatic 5½ inches long — 4½ inches high. Fires 22 cal. pellets just as fast as you can pull the trigger with realistic moving slide action. Great for fast action combat—type target practice. 50 reusable 22 cal. pellets free. Free supply of targets. Money back if not satisfied. Just send \$1.25 plus 25c Not sold in NY City.

HONOR HOUSE.

Dent. 52392766. Lynbrook, NY, 11563

Dept. 523PK76, Lynbrook, N.Y. 11563









since. Reportedly it's still a top seller and I personally know several people who hunt with it.

Later the Dixie Pistol, a brass percussion derringer, a Pennsylvania rifle, and other models were added to the line. By 1957 other firms began mass importation of caplock revolvers and other muzzle loaders. Turner's comment is "some of them sell more than I do today, so they must be smarter, but I was first, My business is different from theirs, but I wouldn't trade."

An interesting part of the Dixie operations is the supplying of kits from which any patient gun buff can build his own favorite style muzzle loading gun. The kits range from a smoothbore flint lock "Overcoat (great coat) Pistol" at \$14.95, up through a deluxe Pennsylvania flint rifle with silver furniture at over \$150. And there are all manner of other goodies and supmarket for the black powder shooter. Though most goods are sold by mail through the huge catalog, walk-in customers or gun buffs who simply want to look over Kirkland's collection on display are welcome. There will be seen evidence that guns are not his only interest. Quite a number of fine antique automobiles are also displayed out back.

But, back to the supermarket bit. The Dixie catalog, which is personally supervised and continuously revised by Kirkland, is now 260 pages thick and lists over 6500 different line items. It is the largest single catalog of muzzle loading and related items in the world-quite a step up from the first 12-page mimeographed flyer mailed nearly 20 years ago. Skipping through the catalog is more fun than a visit to the shop because thousands of the items pictured and described are not on display in the showroom.



Turner Kirkland's collection isn't exactly limited to Americana, as can be seen by this like-new wheel lock.

plies with which a kit gun can be fancied up. To the best of my knowledge, Dixie Gun Works is the only firm offering kits of this sort all ready to go. One can, of course, buy the many individual parts from several sources to form a kit of sorts, but only Dixie offers them fully prepared. Generally, these kits are for a model already sold in finished form—a logical move since all parts are already in production. Turner figures his kits are within the mechanical ability of the average gun buff, but that a beginner may spend as much as 120 hours finishing a rifle; a bit less if he's had a fair bit of experience. At the other end of the scale, as little as 20 hours will often complete some of the pistol kits. The lines-the aesthetic appeal-are more difficult than the mechanical work, and it is this that sets the artist aside from the mechanician. There is immense satisfaction obtained from building one's own gun, then taking game with it in the field.

The Dixie shop is a veritable super-

Most interesting to the collector, gunsmith, and restorer is the section devoted to parts. Every imaginable size nipple is offered, along with both original and modern manufacture hammers, springs, furniture, lock parts, barrels, ad infinitum, for all the Colt percussion revolvers, many flint lock arms, and a host of other old guns. Some parts are original; many are completely finished modern manufacture; and many are in rough form requiring hand finishing and fitting by the user.

When asked about the rough-finished parts, Kirkland said: "I can sell sand-cast brass furniture cheap enough anyone can buy it. Fully finished, it would be priced out of sight and anyway wouldn't fit old stocks that are worn and warped. There's plenty of metal in my castings to fit them exactly and for the buyer to shape them, like in trigger guards, to suit himself. The wax cast parts like our replacement hammers and frizzens and pans for North, Palmetto and

Springfield pistols need the extra metal for proper fitting to other worn parts of the old guns. Where we can make completely finished parts that will work right and sell at a price people can afford, we do, like our Colt and Remington parts." It is a fact that many fine old guns are readily restored for either shooting or collecting by careful fitting of a replacement part or three from Dixie, Imagine how difficult it would be to carve and file a new North or Brown Bess cock or frizzen from a solid chuck of steeland that's the way it would have to be done without these parts.

There are also tons of original parts for later guns such as the Spencer. trapdoor Springfield, Gallagher, Burnside, Peabody, Ballard, Smith, Lee, Kennedy, Whitney, and other early and scarce cartridge guns too numerous to mention, Old parts stocks are bought up and cataloged for sale whenever they can be found.

The military accoutrement buff will find a wide range of buttons, badges, knapsacks, cartridge boxes and belts, and other items needed to assemble complete outfits around particular military arms-as is done in the North-South Skirmish Association. These items fit right in with either collecting or shooting muzzle loaders.

Kirkland also gets into other but related aspects of old weaponry. He has flails, maces, tomahawks, helmets and body armor, swords and knives, etc., as well as powder horns, gunflints, flasks, bullet molds, and-would you believe-goatskin wine bags and moose teeth. He can even supply a nodule of raw flint if you want to try your hand at knapping or shaping a flint knife or lance point.

Kirkland loves to shoot muzzle loading cannons, so the DGW catalog lists them from hand-size miniatures to the full-size James or 3/4 scale 10pounder Parrott of Civil War vintage weighing nigh a ton. All are modern production and may be had finished or as sets of castings to keep you off the streets and out of ginmills during evenings and weekends. Most popular, Turner says, is the Dixie Civil War Field Cannon of 2%6" bore, 43" long tube and 38" wood carriage wheels. Kirkland claims it's the largest assortment of cannons available anywhere.

One of the most valuable parts of the DGW catalog is the extensive reference section in the back, comprised of loading data, serial number charts, inspector's marks, and a host of other info valuable to collectors and shooters alike.

This catalog carries an unusual price label "\$1.00 or send \$2.00 if you like this book." And just to show how highly it is regarded, thousands of people send the extra buck—and even \$2 doesn't nearly cover printing and mailing costs. This year Turner figures he'll distribute over 85,000 catalogs that will be greedily devoured by at least a couple million black powder buffs.

Many people are not aware that DGW also handles many high grade collector's guns. Turner tells us that last year over 1000 choice pieces passed through the doors, ranging from Colt's percussion revolvers to a full-size Gatling gun complete with carriage. He travels constantly seeking fine guns and attends all the major shows throughout the country. "Good guns are hard to find now," says Turner, "and it's getting worse, but I don't do too bad."

Dixie Gun Works is the only really large purveyor of muzzle loading goods which sells virtually everything direct to the shooter by mail, without any middleman dealer. The idea behind that is lower prices and faster service, the latter because all stock is in one central location. In most cases, orders are packed and ready for shipment the same day received-and that ain't bad.

It's always refreshing and encouraging to see a man who has built his hobby into a million-dollar-plus business and made thousands of people happy in the process. Turner Kirkland has done just that and Dixie Gun Works serves a nation of muzzle loaders.



5000 **FIREARMS** BARGAINS

SHOTGUN NEWS

Are you a gun trader? Gun collector? Or are you just plain interested in guns? If you are, you'll profit from reading the bargainfilled columns of SHOTGUN NEWS, now published twice each month. It's the leading publication for the sale, purchase and trade of firearms and accessories of all types. SHOTGUN NEWS has aided thousands of gun enthusiasts locate firearms, both modern and antique-rifles, shotguns, pistols, revolvers, scopes, mounts . . . all at money-saving prices. The money you save on the purchase of any one of the more than 5,000 listings twice a month more than pays your subscription cost. You can't afford to be without this unique publication.

Free trial offer! Money Back Guarantee.

As a special introductory offer, we'll send you the first issue of SHOTGUN NEWS free of charge with your one year subscription. That means you get 25 big issues. What's more, if you're not completely satisfied, just tell us. We'll immediately refund your money in full and you can keep the issues you already have. Fair enough? You bet! Fill in the coupon below and mail it today!

SAMPLE COPY . 50c

FULL-LINE SER

Dixie's Gun Catalog is the second most widely read in the world . . but we are working harder!



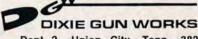
NEW DIXIE CATALOG NO. 120

· Giant-size 15th Anniversary Edition

Nearly 100 modern muzzle-loading replica firearms to choose from.

Over 250 pages of rare antique gun supplies, including complete kits for building your own muzzle loader.

Everything in DIXIE'S catalog can be ordered direct-no restrictions.



Dept. 2, Union City, Tenn. 38261

1	THE SHOTGUN NEWS G-4 Columbus, Nebr. 68601
	Yes, send me the first issue of SHOTGUN NEWS FREE and start my subscription for one year. \$3 enclosed—to be refunded if I'm not completely satisfied, Foreign \$9.00.
1	Name
1	Address
1	City & State

Just \$1.00 postpaid . Outside USA \$2.00

WINGO:

INDOOR SHOOTING FUN

(Continued from page 22)

the gun cannot be turned toward spectators by an excited shooter. Once the gun is fired, the safety solenoid is de-energized and the gun returns to the safe condition, preventing it from being fired during the reloading and handling until the next target is ready.

A special .20 caliber, brass shotshell is used for Wingo. The shell looks somewhat like a .22 rim fire shot cartridge, however a standard .22 LR shell, or any other rimfire ammunition cannot be chambered in the Wingo

keep both eyes open to easily perceive and track the target.

Shooters who take time to establish a perfect "sight picture" will be shooting too late and will be penalized in scoring even if they make fairly consistent hits. Skills for this sport not only emphasize accuracy, but concentration and quick reactions as well. One pellet striking the ice ball target will result in a hit, so it is not necessary to powder-the target every time to assure high scores.

Targets are launched from an in-



This is another view of the team area where the action takes place. While the shooter waits for the target to be released his teammates plan strategy. Targets fall to the floor and melt. Drains are provided for water.

gun. The special load contains 119 #12 shot compared to 125 for the .22 long-rifle shot shell. The smooth bore of the Wingo gun prints a 20-inch pattern at 40 feet which is more than ample for making targets easy to hit.

The gun is equipped with a newly designed Weaver Qwik-Point optical sight. The field of view is not magnified, but a super-imposed, seemingly illuminated red dot indicates the point of impact. The dot is adjustable vertically and horizontally so the pattern can be centered on the target. Since the dot is always in the same focal plane as the target, the shooter can

clined wall panel facing the shooter 50 feet downrange. The front of the panel as well as the end wall of the field is covered with cork paneling to absorb shot pellets. Launching tubes are located at the four corners of the panel with a fifth launcher in the center (like the "5" on dice.) A target can be launched from any of these five tubes in a gentle arc directly toward the shooter. By pushing the various selection buttons on the control console, three speeds and any one of five launching positions make 15 possible combinations to confound the shooter. Since the opposing team

operates the console for each shooter, it becomes a fine art to "psych-out" the shooter and look for weaknesses . . . he may be a sucker for a slow ball out of the lower right-hand launcher.

Targets are launched at an average speed of 30 miles per hour. The combination of a short flight and the arcing pattern of the target makes for a unique challenge. Since reaction time is so very important to good scoring, most experienced skeet or trap shooters find ample challenge in making top scores. It takes an average of about four to five weeks to become a good Wingo shooter. Free instruction is available as well as help in forming shooting teams.

Scoring for Wingo is similar to bowling in several ways-there are 10 opportunities to earn points, and bonus points are earned for multiple hits in each turn. Each time the gun is fired, a number, indicating the shooter's reaction time, appears on an illuminated screen (the shot score readout.) A shotscore of 10 indicates quick reflexes; a 4, 5, or 6 is about average; a 1 or 2 shows need for more practice. A number will appear every time the gun is fired-to earn the points displayed on the shot score readout, the target must be hit. A player's first two turns consists of 3 shots each. In each turn, the first hit is worth one times the shotscore: the second hit, twice that value: the third hit, 3 times that value. In the third turn, consisting of four shots, the final shot is automatically worth twice the shotscore readout, if the target was hit. An accumulative score is maintained from one frame to the next. A perfect score in Wingo is 200: 125-150 points is considered quite good for consistent performance. While many accomplished trap and skeet shooters may pass off Wingo as child's play, all of them who have taken the time to try out the new sport say that they have come away with reaction and concentration skills they did not have before; they have returned to the skeet and trap fields as improved shooters. But there is nothing quite so shocking as the experienced shooter who takes his first shot at Wingo with a confident look on his face . . . he mounts the gun to perfection and with the best ATA stance, calls for the target and fires . . . a clean miss!

Wingo appeals to women and youngsters as well as men because quick reflexes and good coordination are stressed more than muscle-power. This is a plus factor, since acquiring effective gun skills at an early age is more likely to lead to positive adult attitudes toward shooting sports. Wives who would not go to a skeet



Comfort and relaxation are well taken care of in one of several cocktail lounges and concourse cafes. "Great Moments in Sports" is the central motif highlighting interior decor. Women enjoy the sport and surroundings.

range or field hunting with their husbands will not avoid Wingo. Many women go wild over the new sport. Whether it's "Women's Lib" or whatever, the romance of the gun comes through, Pete Baumert, Wingo Center Manager, tells of conversations with ladies from Wingo leagues who say that after shooting in a league for several weeks, they can, for the first time, understand why their husbands go hunting and spend time at shooting sports. Mixed shooting leagues have been very successful; Wingo involves recreation for the whole family. Cost for a game of ten shots is one dollar. League shooters get 36 rounds for \$3, which makes it quite reasonable for an evening's entertainment.

One of the most interesting aspects of Wingo is the 25%" hollow iceball target. It is a marvel of simplicity and has been developed only during the past year prior to the opening of the San Diego center. During the research phase, various materials were used, from glass Christmas tree ornaments to frangible plastic spheres. Everything that was tried presented not only a logistics problem, but produced a residue that had to be cleaned up and disposed of. (Ecology at work.)

A special machine was designed and manufactured by the Detroit Tool and Engineering Company of Lebanon, Missouri to produce Wingo ice ball targets on the spot minutes before they are launched toward the shooter. Each of the 18 shooting fields has its own "ice machine", located backrange, and capable of making six targets every 2 minutes, 6 seconds. Spherical molds fill with prechilled water, then refrigerant is circulated through the mold jackets. The water quick-freezes in a thin film next to the inside surface of the mold to a

thickness of about ½0 inch. The freezing cycle is stopped and the molds open. The frozen targets, with water inside, are positioned on a rack where they are punctured to allow the unfrozen water to drain from the inside. The rack then tilts down, allowing the finished product to roll into a freezer-storage chamber adjacent to the molding machine.

Targets are continually rotated in the 22°F, storage chamber to keep them from sticking together. As new targets enter the freezer, the older targets are pushed to the top. Capacity of the chamber is approximately 150 ice balls; as more are produced, the oldest surplus targets are pushed out of the chamber and melt in a drain pan.

The lauching process is as intriguing as the target-making machine. The five target launching stations are connected to the storage unit by a network of clear plastic transport tubes. On command from the logic (game control) system, a plunger feeds the target into the transport system and a pre-selected launcher is opened to accept the target. At this time a blower turns on, applying air pressure to the underside of the target. With the network airtight, except for a vent opened in the selected launcher, the target rises in the tube and is sent through the network and into the correct launcher breech.

A compressed air accumulator and regulator releases a measured volume and pressure of air to launch the ice ball toward the shooter. The amount and pressure of the air determines whether the target travels at a slow, medium, or fast speed (approximately 30, 40, and 50 feet per second, respectively), according to how the console was programmed. The whole





SILENCERS (VOL.

Never before such a book, detailing the history, development, design and use of ficearm silencer from antiques to OSS and CIA Super-Siy wearons, an artique to OSS and CIA Super-Siy wearons, and reled and continuation bayonst-alleneers, uddition, to construct a logal stiencer for indoor range, and revealed with over 200 detailed filustrations, 24.

AR-15/M-16 RIFLES

AR-15, 8-16 RIFLES a braid new release, with complete exverage of civilian and late military developments, plus snees on the Commando Sub-Machinegua, 223 HiAR and 40mm launchers. Every facet covered from use, detail disassembly, repair and malatenmos, various civilian and military models—the complete various civilian and military models—the complete for every AR-15 owners or M-16 mily. Amount of the complete cover a hundred range, hundreds of detailed lilus-indicates \$25.50.

THOMPSON SUBMACHINE GUNS

THOMPSON SUBMACHINE GUNS the richest collection of tractical and technical Tomony gun information ever compiled under one cover. Over 200 prafusely illustrated pages. Everything from use to complete overhauf and rebuilding, only 8 m.

SUBMACHINE GUNS

SUBMACHINE GUNS 45 M3 and M3A1. The famous preasegums of WWII and Korea, covered in 150 mages of lituatented detail; use, maintenance to complete rebuilding \$3.

GERMAN INFANTRY WEAPONS

GERMAN INFANTRY WEAPONS recent declaration of Intelligence documents permits release of the look you've been waiting for, 203 well illustrated pages 33.

.30 CARBINES

.30 CARBINES M1. M1A1, M2 and M3, the simuland reterence work on the US .30 Carbine ramily. Use, nolice automatic conversion, to all details of sometic rebuilding. 221 profusely illustrated cares. S3.

GARAND RIFLES

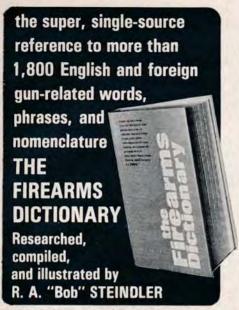
GARAND RIFLES MI, MIC, MID, bastlefield use to complete rebuilding in 175 clear illustrations, 160 pages, includes section on 308 conversions, 331.

All Books Postpaid, Satisfaction Guarentees or Money Back, Write for free new catalog of books on western, military, military and police science.

Normount Armament, Box 211 GNS Forest Grove, Or. 97116, USA







This long needed treatment of gun language goes beyond mere definition to explain, picture, and relate the common, the hard-to-understand, the often misused terminology of firearms, ammunition, accessories, and gunfixing techniques. For the historically curious it reflects how many of the terms came to be known as they are

Terms and phrases are listed according to the major Terms and phrases are listed according to the major category word and cross references appear continuously. Secondary references are commonplace, and refer you to other entries that will expand your understanding of a particular subject. The clear cut definitions are presented fully under the term most closely understood to be the correct technical term. For instance, most of you have probably heard of a blue pill. The correct technical term is, of course, proofload and if you looked up blue pill you would find an entry which refers you to the more accurate technical term.

what about trade names? When a particular product— because of its long and respected usage—has come to be referred to universally whenever that item, regardless of manufacturer, is discussed, that trade name has be-come a part of gun language and as such is included. An example is Luger, often used when describing pistols of similar design.
Important mathematical formulas of interest—reduced

Important mathematical formulas of interest—reduced to simplest terms—are here, and nearly 200 fillustrations—photos and drawings especially made and selected for this book—show in detail exactly what is being explained, mostly in particularly uncommon entries.

The Firearms Dictionary for the first time brings into focus the current terminology of this broad, technical, and sometimes confusing field. It untangles for everyone who owns, uses, writes and talks about guns and things that go with them, all the complexities of this special language. In dictionary form, it is more an in-depth, illustrated exploration of gun lore and language and will be useful to even the most casual reader about or user of firearms.

288 pages Nearly 200 illustrations

Bob Steindler's credentials are a testimonial to his ability to produce this long-needed reference. A free-lance writer, collector, experimenter, and shooter for most of his adult life, he has been editor of two gun magazines, frequent contributor to many publications featuring gun writings, authored three previously published books, and has close associations with all the influential figures and organizations throughout the firearms fraternity. His widely-known technical skill comes through clearly in this ssful attempt to cover and define the complicated language of guns.

State	as subscribers and members
City	Zip
Street	
Name	
Send all to	
Just what I've been loo copies of Bob Steindf TIONARY at \$7.95, □Payment in full encl	er's new FIREARMS DIC-
8150 North Central P Skokie, Illinois 60076	

process is automated, requiring no attendant and only periodic maintenance or adjustments. Broken targets melt on the floor of the range and the water flows into drains.

It is always tempting to speculate on so significant an event as the introduction of Wingo. The need for this kind of indoor shooting sport is unparalleled, if the responsible use of arms is to be fostered and maintained.

If any lesser organization had undertaken this project, I would say it would fail, However, the Olin Corporation through its Winchester Group has spent ample research funds and stands ready to commit the necessary capital and organizational know-how to make Wingo succeed nationally. The enthusiasm, talent, and integrity of all the Wingo people I have met indicates that this is a sophisticated, professional effort. It is more than likely that we are witnessing the very beginning of a mass participation shooting sport that may very well become as popular as bowling or other league sports.

The opportunities offered for safe and sane training in proper gun handling skills will educate millions of citizens to the sporting uses of arms; this will help balance the hysteria of the gun-haters and arms prohibitionists. If you want to do yourself and shooting a favor, when Wingo comes to your town, go to the Center and learn to play this fascinating game. You'll like it. Wingo swings!

FOREND TIP: DO-IT-YOURSELF

(Continued from page 27)

and well worth the little extra trouble to install a simple dowell joint. This gives added glueing area and adds considerable resistance to any pressures coming from the side. This is especially important with stocks which are bedded so there is upward pressure on the barrel at the tip of the stock. The dowel installation is nothing more complicated than a couple of 1/4" or 3/8" hard maple dowels side by side and extending about one inch each way onto the forend tip and the stock. It would be difficult indeed, without special rigging, to drill perfectly aligned holes which would allow a tight fit in both stock and forend tip and insure perfectly matching surfaces. Fortunately, however, such perfect alignment isn't necessary or, for that matter, even desirable.

All you need to do is "eyeball" the holes in tip and stock but make them oversize enough so there will be enough free play to allow the two surfaces to come together perfectly.

If you intend to add thin contrasting spacers of light colored wood such as maple or holly, now is the time to get it ready, for the final act is coming up. Cut the spacer so the grain runs vertically, drill a couple of holes for the dowels and you're ready to move

For the actual glueing operation give the dowels a good coating of glue, put more glue into the holes and

spread a thin, even layer to the two mating surfaces. Be sure to get enough glue into the oversize holes to fill up the free space. If this is done correctly the dowels will be locked in place as tightly, or more so, than if the holes had been a perfect fit. Now push the tip on hard enough to squeeze out all the excess glue and bring the two surfaces to a flush fit.

Now comes the problem of how to keep the tip squeezed tightly against the stock until the glue dries. If you have a complete woodworking shop you probably have a set of large bench clamps. Fine, put everything in the clamp and draw it up tight. But what if you don't have a set of clamps? Don't worry-just use a great big rubber band. This means a bicycle inner tube . . . (If you don't have one on hand just stop by a bicycle repair shop and they'll probably give you an old one.) Just stretch the tube up over the tip and back around the butt. This puts on plenty of pressure.

After the glue dries all you need to do is work the tip down to the same lines as the stock, round off the tip to suit your taste and the job is all over except for the finish. If you intend to use a grip cap which matches the forend tip the installation is essentially the same but this time there is no need for the dowels. Just be sure to get the two surfaces perfectly flat and smooth.

ERMA KGP-68-A: TOGGLE-JOINT PISTOLS

(Continued from page 33)

At the start, I again had problems. Super Vel's High Velocity loads plus the design of the bullet nose enabled me to shoot-in the pistol. It functioned perfectly from the start with Super Vel. Then I put a box of Federal ammunition through it finishing with Norma. By the time I got around to the Norma ammunition the little pistol was spitting out the empties with flawless precision. As I mentioned above, these pistols appear to need "shooting in."

tate easy loading of the magazine. This is a stamped metal tool that allows the shooter to slip one end over the magazine follower stud so that the thumb may more easily depress this follower stud to allow the cartridges to be dropped into the magazine. Without this gadget, I was unable to hold down the follower stud for more than a couple of seconds. Upon unpacking this pistol from its box, be sure to hang onto this "funny looking thing." I nearly threw mine away be-



I tried a couple of times to settle down at a benchrest and, using two hands, fire a representative group with each handgun, but I was unable to see the sights consistently. As a result, I have no record of how well either pistol will group. On the other hand, neither pistol can be considered anything except a plinking or fun handgun. In order to maintain the illusion of the Parabellum Pistol, Erma has duplicated the old time sights thus putting the shooter behind the eight ball right at the start. I would like to see them bring out a modified square, white outlined rear sight with a blunt, square matching white insert in the rear of the front sight. As it is, it is nearly impossible to obtain a good and consistent sight picture with either pistol.

The .380 comes with an aid to facili-

cause, at first sight, I thought some one had accidentally dropped a reject stamping into the box.

These Erma pistols should prove to be just the thing for the man who is a Luger fan. They allow him to enjoy all the fun of shooting one of these fabulous collector's items without actually doing so. As a straight fun-gun for camp, fishing or plinking, the shooter will find it hard to beat these little Ermas. By the time you read this article, they should be in your local dealers, officially designated the Erma KGP 68-A. Price \$89.95.

I understand that my two pistols are production-run guns and that the factory is going all out on these models. So, take a good look at them, heft them—and, at this point, I leave you with these little "Knebel Gelenk" Toughies!



Fore-End Stop, Specify gun; from	5.75
FREELAND Tube Rear Site	50.00
FREELAND "AR" Shooting Mat	31.00
" Foam Padded Shooting Glove	5.85
" Zipper spotting scope care	6.25
" SWISS type palm rest	21.50
" OLYMPIC Alum, Butt Plate #1-ABP	15.50
"Mr. Cairo" Palm Rest. STD	21.50
FREELAND "61" Butt Plate Comb	47.50
" SUPERIOR Front Sightfrom	16.00
" AF-55 Canvas Rifle Case	22.50
" KNEELING ROLL	6.50
" OLYMPIC Palm Rest	16.50
10X %202 or #209 Rifle Coat	26.00
FREELAND Sling Keeper	1.50
GEHMANN DIOPTER	26.00
19" Kit Stool w/pockets	12.00
#1200F A.O. Overhead Ear Protectors	11.55
B&L Shooting glasses	25.00
Lyman 310 Tool, give caliber	18.50
Standard Rifle or Pistol die set 13.50 to	15.00
Freeland Accessory Kit	
WEAVER D-6 Scope	

Prices Subject to Change Without Notice "Add for postage, please"

ALL GUNS-SIGHTS-GUN CASES-SCOPES-MOUNTS
RELOADING SUPPLIES, BLUEING & CLEANING ITEMS.

Write For Pamphlet. Send \$1 For General Catalogue

FREELAND'S Scope Stands, Inc. 3737 14th Ave., Rock Island, III. 61201



SERVING COLLECTORS FOR 20 YEARS
OFFERING THE MOST HARD TO FIND AND DESIRABLE

ANTIQUE FIREARMS EDGED WEAPONS

and related items from the U.S. and all over the World for sale in its exciting, thick, 220 page catalog-reference book. Over 1000 items, all photo-illustrated, fully described and priced to sell. This valuable book will be sent to you immediately via first class mail upon receipt of \$2. You don't want to miss it.

THE MUSEUM OF HISTORICAL ARMS 1038 Alton Road, Dept. N Florida residents add 8c tax





Millions of surplus acres. Direct from government agencies. No middlemen

government agencies. No middlemen . . . Family Vacationing. Fishing. Hunting. Homesteading. Investing . . . For amazing "where" & "how" ALL STATES - ALL CANADA GOVT. LANDS DIGEST" . . . plus invaluable Canadian maps — Rush \$1.00 (Guaranteed) Can-Am Lands, P.O. Box 1147, Buffalo, N.Y. 14240.











The de-kicker de luxe that is precision machined into your rifle barrel, avoiding unsightly hang-ons. Controlled escape for highest kinetic braking, minimum blast effect and practically no jump. All but prevents jet thrust (secondary recoil). Guaranteed workmanship. Folder. Dealer discounts.

PENDLETON GUNSHOP 1200-10 S. W. Hailey

POINTBLANK: COL. CHARLES ASKINS

(Continued from page 19)

stamp of approval of the gun or cartridge.

Somewhere, and not vet in being, we need a lab that would endeavor to do a completely objective job on all the scores of items that appear annually and are advertised and sold without anything more than the maker's claim that it is satisfactory. If some adventurous soul had the temerity to commence the field tests of all the shooter's equipment that annually reaches the market he would not only be a god-send to the poor benighted consumer, but he would also be an equal boon to the manufacturer who may not have the test facilities in his own shop to find all the bugs in his new offering before he puts it on the market.

. . .

In California there is an association that is dedicated solely to the collection of Colt commemorative sixshooters. The company, since 1961, has put out a total of 108 different special-event handguns. Most of these have been the old Model 1873 forty-five single action and along with it the little .22 single action called the Scout Model. Here more lately, the company has made up a series of .45 auto pistols to do honor to the World Wars.

It is probable that Winchester has made more fuss about their commemorative rifles than has Colt about its limited-edition pistols. About 1966, when Winchester celebrated its 100th birthday, the outfit really got on the band wagon so far as the commemorative shooting iron was concerned. In 1965 they had tried a special limited-number rifle and it had sold well. This plus looking over at the successes of Colt persuaded the Winchester brass that here was a vein of gold that had better be tapped. The 1866-1966 commemorative rifle was planned for a limited run of 100,000 units. These were sold in 90 days and the company realized that the run should have been a half-million.

We have had special Winchesters to celebrate Buffalo Bill, the joining of the rails across the country, Teddy Roosevelt, Canada's 150th birthday, Alaska's 100th centennial, the great western character, the cowboy, and this year the 125th birthday of Texas as a state.

The facts are, however, that Colt was the first to discover just how re-

munerative this limited-number issue of guns could be. They started off in 1961 with a gun to celebrate the 125th birthday of the company. This .45 single action was called the 125th Anniversary edition and a total of 7,368 were made. These pistols sold for \$150. Today one of these guns is worth \$325. Thus encouraged, Colt was launched and before '61 had pinched out they had made six other commemoratives. The most popular of these was a single action to do honor to the commencement of the Civil War. It was the Civil War Centennial Model. Some 24,114 were made up. This was a miniature of the 1860 model Colt and sold for \$32.50. Today it is worth \$60.

During 1962 another 7 different commemoratives were offered. The most unusual of these were the Fort Findlay cased pair and only 10 pairs were finished. These sold for \$185 and today no price is quoted on them.

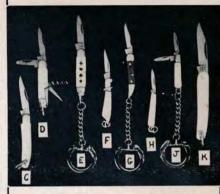
There were 10 different special-edition models turned out in '63, but 1964 was a banner year. Then some 26 different guns were made up. The most expensive was the Col. Sam Colt Sesquicentennial Deluxe Presentation SAA .45. It sold for \$1,000 and today is drawing \$1,850. Only 50 of these extra fancy guns were produced.

There were 12 models completed in '65 and eleven commemoratives in 1966. In '67 the first of the special .45 automatics were made up to do homage to the major battles of World War I. The commemorative sold for \$200 but if you were a real bug you could pay \$1,000 for the deluxe edition. The pistol doing honor to the battle of Chateau Thierry was only made up in 25 units and sold for \$1,000.

During 1968 there were another dozen limited guns. Among these were 3,000 Pat Garrett specials. These sold for \$110 in .22 caliber and for \$220 in .45 caliber. This annual issue (1968) continued with the commemorative .45 automatics, as well.

Last year, 1969, there were thirteen more collector models turned out. These have now gotten into World War 2 and like those automatics for World War I, include some mighty fancy-dan models. Along with these there is a Colt to do honor to the linking of the rails across the continent, a series for Wild Bill Hickok, and a California Bicentennial model.

MIDGET AND GIANT POCKET KNIVES



MINI POCKET KNIVES

Made with the same skill, craftsmanship, and quality materials as our large pocket knives. Available with or without key chain at the same price. Made in Germany.

	PETER 11 1 15/1/ 1 1 01 05
	PEARL, one blade, 15/8" closed \$1.95
D	SCOUT, FOUR PIECE, 11/2" closed \$1.95
E	CARD, 1 blade, 11/2" closedS1.50
F	ARABIC, white handle, 1 blade, 13/8"_\$1.50
G	RED SWITCH, red handle, 1 blade,
	13/8"
H	BABY PEARL, 1" closed, pearl
	handle
J	TWO BLADE, 1" closed, perlex handle_\$1.95
K	BIG BABY, 2" closed, one blade,
	perlex\$1.50



JUMBO FARM KNIVES

We import these from Fredr. Herder of Solingen. West Germany. Made of high carbon tool steel, perfect flat grind with handhoned edge, a strong spring to hold blade tight, and a man's sized handle of hardwood.

64 BABY JUMBO, 31/2" closed, 23/4"	
blade	\$4.50
4251 LOCKING JUMBO, 43/4" closed,	blade
locks when open	
66 BIG JUMBO, 6" closed, 434" blade	

Mail Orders Promptly Filled. Add 75¢ Per Order.

CORRADO CUTLERY, INC.

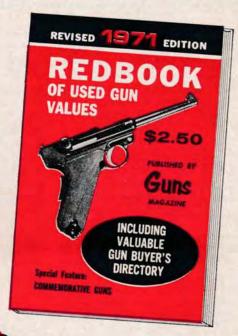
26 N. CLARK - DEPT. G-41 CHICAGO, ILL. 60602

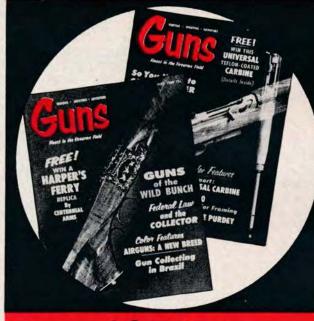
Write for Free Catalog of 500 Knives

ALL-NEW... COMPLETELY REVISED... 1971 EDITION

GUNS Magazine's 1971 REDBOOK is ready and waiting for you, and it's bigger, better and more comprehensive than ever before! No gun enthusiast should be without this valuable, practical book which has a wealth of information not available anywhere else. It shows you what to pay and what to look for. How much your firearms are worth and how to bargain for the best prices. The REDBOOK lists the latest, most up-to-date evaluations for more than 2,500 firearms. Every weapon is described in detail as to type, make and model, Stock, barrel, bore, year of make and all other unique features are also listed. Each listing is rated according to excellent, good and fair condition. And as a special bonus, the 1971 edition lists hundreds of hunting and shooting goods manufacturers you can write to for free literature and information. Don't delay, take advantage of this special offer to obtain your copy FREE!







PUS 2 FREE ISSUES of GUNS MAGAZINE

GUNS has added more pages, more color, more in-depth editorial features, and more nationally known firearms authorities. And for the first time in any firearms monthly, GUNS is now loaded with realistic, full 4-color reproductions of famous firearms—past and present; in use and on display. Long recognized internationally as "The Finest In The Firearms Field," GUNS has now created an entirely new dimension in firearms publishing. Take advantage of this offer now! When you confirm your order with payment, two FREE issues will be added to your subscription, and you will receive 14 issues for just the price of 12. Act now!

AND 1 50 SAVINGS OVER THE NEWSSTAND

PRICE

Subscribe during this special offer and you will also be saving \$1.50 over the regular newsstand price for GUNS Magazine. Here is how this added savings bonus works to your advantage. If you purchased individual copies of GUNS on your favorite newsstand, you would pay 75c per issue, or \$9.00 per year. But, by entering your subscription now, you pay only \$7.50 per year—a \$1.50 savings on one-year subscription! And that's not all. If you do not agree that GUNS is invaluable, just tell us. We will immediately cancel your subscription with no charge whatsoever. You can't possibly lose. You must be satisfied or it won't cost you anything. Subscribe now!

SAVE \$5.50

- FREE 1971 REDBOOK
- 2 FREE ISSUES
- \$1.50 SAVINGS

MAIL ENVELOPE TODAY



USE SUBSCRIPTION COUPON ON PAGE 76 TO OBTAIN BONUS BOOK DISCOUNT!



THE BOOK OF THE CON-TINENTAL SOLDIER by Harold Peterson

by moroid Peterson

A pages-of-the-past look at the seldom seen side of the American Revolution, the armount of the american Revolution, the armount of the american term of the moroid of the seldom of the seldom of the hardships and joys of the life and times of America's first soldiers.

Regular Price\$12.95

Subscribers Pay Only .\$10.25

COMPLETE REVISION COVERS BOTH PISTOLS AND RIFLES!

the home guide to CARTRIDGE CONVERSIONS

"Nonte knows more about it than any other man. He tells how to load good ammo for thousands of obsolete guns. You'll be surprised at the number of substitute cases you can use for most current U.S. and foreign cartridges. Complete dope, test loading data for every cartridge, every dimension. Clear and simple, for novice or professional custom loader"—Kent Bellah. 416 pages,

Regular Price\$8.95 Subscribers Pay Only\$7.00



SURE-HIT SHOTGUN WAYS by Francis E. Sell

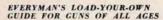
by Francis E. Sell
Here is how and why the whole
gunning routine is integratedfrom gunner and gun to the ultimate shot. Gauges and their
use; chokes and shot patterns;
selecting your gun; custom fitting a factory stock; slugs; buckshot; secondhand bargains; recomplete investigation of form,
footwork and shooting methods
in each kind of situation! 160
pages, illustrated,

Regular Price\$5.95 Subscribers Pay Only .\$4.50

THE DEER HUNTER'S GUIDE - Sell

Newest offering of what it takes to hunt deer successfully. It teaches about weapons and ammunition, overcoming problems of shooting in brush, gauging speed of deer, choosing the best scope or sight, getting proper lead on target, the mastery of trail watching, using deer thot spots, "advantages in the wind and proper noises, but the second of the proving techniques for getting any proctice ways for improving techniques for getting any

Subscribers Pay Only\$4.00



PRINCIPLES AND PRACTICE OF LOADING AMMUNITION - Naramore

In this complete, two-part presentation, Col. Naramore provides the basics of ballistics: mechanical principles of cartifuges; proper and improper methods of assembly; and the control of the control of

Subscribers Pay Only\$12.00

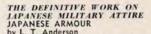


INTRODUCTION TO MODERN GUNSMITHING-MacFarland

In this workbench reference, you see the easy-to-follow trouble-free ways for solving problems of malfunction, picking and Improving actions, getting the best working different steels, correcting and mounting scopes and sights, employing reliable methods with metal finishes, creating sporting stocks, licking assembly confusion, etc.

Regular Price\$6.95

918 Subscribers Pay Only \$5.25



A comprehensive study of a fascinating martial society, Helmets, full armours, helmet bowls and masks and make and provide solution of the study of the solution of the solution and the your reading enjoyment. This volume provides valuable historical background material for all students of Western military culture.

Regular Price\$4.95 Subscribers Pay Only \$3.95



HATCHER'S NOTEBOOK by Julian S. Hatcher

by Julian 5. Hatcher
Want to know identification
codes of foreign arms, amnunition, and optical instrument makers? Facts about
neadspace and how it effects
shooting? History of the
Pedersen Device? The rule
for computing ordinates to
trajectory? All about exterior ballistics. The mondreds
of questions this 40-yearsof-experience book answers
for anyone in any of the
many special gun areas.

Price

Regular Price \$10.00 795 Subscribers Pay Only\$ 7.95



THE BOOK OF PISTOLS by W. H. B. Smith

270 Regular Price \$14.95

Subscribers Pay Only \$12.00

THE BOOK OF RIFLES by W. H. B. Smith

275 Regular Price \$12.50

Subscribers Pay Only \$10.00

Special Price for Set:

BOOK OF RIFLES and BOOK OF PISTOLS AND REVOLVERS

270-W \$27.45 value now . . \$19.95

Subscribers Pay Only \$16.00

THE STANDARD REFERENCE TO U.S. MARTIAL LONG ARMS

IDENTIFYING OLD U.S. MUSKETS, RIFLES AND CARBINES - Gluckman

For the collector, buff or dealer—an easy to tell them apart guide to details of caliber, length, barrel markings, fittings, production, manufacturers—fully describes these and all other individual weapon characteristics. A new addition to this printing provides a list of arms inspectors and markings.

Subscribers Pay Only



THE CIVIL WAR COLLEC-TOR'S ENCYCLOPEDIA by Francis A. Lord

by Francis A. Lord

A magnificent and unique book
to satisfy the specialist, collector and buff regarding wearons and uniforms used by soldiers, sallors and marines from
both the Union and Confederate
forces. Grouped in 156 major
topics, material is arranged
alphabetically for casy reference.
A profusion of photographs and
detailed illustrationsums, collectors and Civil War students
everywhere find this volume indispensible.

370 Regular Price \$17.50 Subscribers Pay Only \$14.00

AGE OF GREAT GUNS - Comparato

Officest story of cannon artillers and the men who made and developed the demons of firepower, From Napoleon's first successful military use to the guided missiles of today the good and the bad of big guns and the quest for bigger, better methods of mass destruction. Of absorbing interest to anyone interested in the history of firepower, and a "must" for students of military weapons. 400 pages, illustrated.

Regular Price\$11.95 Subscribers Pay Only \$ 9.25



MODERN ABC's OF GUNS by Steindler

This comprehensive new study cuts through today's outpouring of technicalities about rifles, shotguns, handguns, calibers, sights, stocks, recoil, ballisties, etc. MODERN ABC's OF GUNS sharpshoots on how to study and evaluate guns and ammunition ads, descriptions, catalogs. It shows and tells how to examine, evaluate and buy a gun, Toppedoff with bull's-eye definitions of the 125 most commonly used terms, ABC's has more than fifty selected photographs and drawings.

Regular Price.....\$4.95 775 Subscribers Pay Only\$3.95

CIVIL WAR GUNS by William B. Edwards

A colorful and dramatic book for the Civil War buff and arms man regardless of his specialty. Above all it is a story of America for all Americans. In 36 chapters, 444 pages, this fascinating book brings you the complete and exciting story of all the guns used in the Great War Between the States, Confederate and Federal. This is the first time such voluminous facts have been brought together in one lucid, readable and unhurried volume.

	Regular	Pric	e		 	 	 	 			 \$15.00
373	Subscrib	ers	Pay	Only	 	e kos	 ***	 	-	-	 \$12.00

ORDER YOUR BOOKS NOW!

Book Dept., GUNS Magazine 8150 N. Central Park Avenue, Skokie, Illino	ois GE
I am a GUNS subscriber, and therefore eligibook discount! I am not a GUNS subscriber. I understand regular price for books.	
Enclosed is \$in full payment for the below. I understand that you will pay post Book #	
NAME	
ADDRESS	
CITYSTATE_	
Please forward additional book lists.	(zip)

THE GUN MARKET

Classified ads 20c per word insertion including name and address, Payable in advance. Minimum ad 10 words, Closing date July 1971

issue (on sale May 23rd) is March 25th. Print carefully and mail to GUNS MAGAZINE, 8150 North Central Park Blvd., Skokie, Illinois,

BOOKS

ALL GUN BOOKS AND RELATED TITLES. Save on our "Baker's Dozen Free Premium Plan" and "Unbeatable Values." Send 50¢ for year-around mailings. Ray Rilling Arias Books Co., 6844 Gorsten Street, Philadelphia, Pa. 19119

RARE AND USED BOOKS on Firearms, Shooting, Big Game, For Sale. Free List. Paul Drabeck, Dept. G, 2886 Roosevelt Ave., Bronx, N.Y. 10465.

COLLECTORS

VISIT DIXIR GUN WORKS, for Antique Arms. Sorry, no lists.

NEW COLLECTOR SERVICE — Rare military books, manuals, war relies, weapons, uniforms, helmets, accountements, metals, insignia, documents, photos, paining, prints, 50 Page Illustrated Catalogue 50c retundable with purchase. Peter Illinka, Historical Americana, Dept. G. 226 Kast 86th Street, N. Y. 19028

NEW 1971 ILLUSTRATED CATALOG of original antique gan parts for U.S. martial longarms. 60 photo plates, 128 pages detailing M1816 then M1903 Springfield, Sharps, Spencer, Enfleld, etc. Insignia, appendages, accountements, books, posters, documents, buttons, headress, for Infantry, cavalry, artiflery, Navy, A detailed catalog and reference text on Military Americans. Catalog \$1.00 refunded with purchase, S & S Firearms, 88-21G Aubrey Avenue, Glendale, New York 11227.

10% DISCOUNT ON GUN REPLICAS — Nationally advertised, metal replicas of famous guns, old and new. Can't chamber or fire ammunition; yet can be disassembled like originals!! Size, weight, balance carefully duplicated. Send now for complete FIEE LISTING. Lowrys, Box 1123G7, Evansville, IND, 47713.

NEW CATALOG-Revised-\$1.00-line Selection of books, home learning films, on GungFu where men Act, Think and Flight like Animals, Karate, Judo, TaiChi Toughening Machines for Poison-Hand Death-Touch KungFu, Secret Oriental Weapons, plins throwing knives and spikes, Exotic Persian, Indian, Afgan Wooden Fighting Sticks, Chains, plus a large unique line of our own style of Combat Knives tested in Viet-Nam and Korea with super secret Grips, Specialized Bades, our Super-Secret Gas Knife for subduing numerous foe, Knives such as Mercenary, Black Widow, Cobra, Satan, Angel of Death, Praying Mantiss, and throwing Knives, Orient East Arms and Armorers 3577 W. Lyndale Chicago, Illinois, 60647.

COMMEMORATIVE Firearms Record Book \$2.95, Personal Firearms Record Book \$2.00, Handloader's Record Book \$3.95, Firearms Serial Number Directory \$2.95, Catalog reproductions: 1878 Winchester \$2.50, 1898 Stevens \$2.50, 1924 Stevens \$2.00, 1987 S&W \$2.00, 1990 S&W \$2.50, 1990 SW \$2.00, 1995 UMC \$3.50, 1990 Remington \$4.25, 1897 Marlin \$3.50, 1910 Hoxie Bullet \$1.00, 1930 Parker \$1.50, PFRB, Box 201G, Park Ridge, Illinois 60068.

FRENCH COLLECTOR of 3rd Reich Daggers, Swords and Trophies seeks American Counter-Parts Collectors/Veterans and Antique Dealers for purchase and/or exchange. Write: Dr. Rajau, 2 Avenue de Chadrac, 43 Le Puy, France.

MILITARY COLLECTORS ITEMS. Mostly British, List .10¢. Wm. S. Phillips, 1418 E. Sierra St., Phoenix, Arizona 85020.

SIGNAL, Magazine of German Army 1942-1945; single copy \$1.50; ten different issues \$9.75 postpaid. Military Catalog 25¢; Sample German medal 50¢. Insignias, Box 71, Rockaway, New York 11694.

ENGRAVING

PRUDHOMME'S ARTISTIC ENGRAVING, Folder \$2.00, 802 Ward Bldg., Shreveport, La. 71101

FOR SALE

LEGENDARY TOMMY GUN—Authentic reproductions of 1929 Thompson Sub Machine Gun price list and catalog, profusely illustrated, \$2.00 postpaid. 1929 Handbook of the Thompson Sub Machine Gun \$2.00 postpaid. Both Thompson books \$3.00. Frontier Press Dept. G., P. O. Box 2922 Spokane, Wash, 99220.

RUVEL & CO. 1971 ARMY — NAVY Store 40 page flustrated catalog. Magazines for carbines, P38, 45, Browning II, P., Garand, Springfield, etc. Rayonets, for carbine, Mauser, Springfield, etc. Helmets, Field Emilpment, Packs, Sieeping Bags, Survival Foods, Field Phone, Rubber Itoats, Tents, Gas Maske etc. All in Stock! Hundreds of other Items. Send 50¢ coin, (refundable first \$5.00 order) to: Ruvel & Co., Dept. D-4, 3037 N. Clark St., Chicago, III, 60614.

STATE PISTOI, LAWS, Bookier describing current pistol regulations of all states \$1.00. Federal Gun Laws Booklet \$1.00. Police Equipment Catalog \$1.00. Horself Schlesinger, 415 East 52nd St., New York 22E, N.Y.

CROSSBOWS, Powerful, Silent, Accurate. English and Domestic, Pistols \$7.95. Rifle Kits \$9.95 up. Catalog .25¢. Crossbowman, Box 723-GM, Manteca, Calif.

GUNS & AMMUNITION

WHOLESALE GUN DIRECTORY. Buy Direct from Manufacturer! Lists American, European Sources. Become Dealer! Send \$1.00. Continental, Box 11211-GP, Indianalisolis. Indiana 46201.

FEDERAL FIREARMS LICENSED Dealers: Write for sensational offerings most popular military rifles-ammo, Send certified copy FFL. Century Arms, Inc., St. Albans, Vermonx.

ANTIQUE FIREARMS, Long list of guns made before 1898. Will trade, send 25¢ for list and conditions. Fulmer's Antique Guns, Itte. #3. Detroit Lakes, Minn. 55501.

3,000 Gnns, Swords - Colts - Kentuckies, Armor - Books - Flasks - Military Accessories - Surplus antumition - Bargains Galore - \$1.00 hrings Agramonte's new Catalog - Agramonte's, 41 Riverdale, Yonkers, N.Y., 10701

RIFLES - Shotguns - Swords - Bayonets - Military Accourrements, Modern, Military, Antique, Sudan Military Saber 38" overall with black leather sheath Traditional Cavalry Saber of India \$13.00 prepaid, Listing of Guns, etc. 25¢. Southwestern Arms Co. Dept. G. 107 Logan Street, Brooklyn, New York 11208.

DOUBLE RIFLES — 4 gauge, 8 gauge 600. 577, .465 .303 and ammo. Mausers .500 or 12.7870, also 11.2872. Send stamped envelope for details. Ray Meyer, 816 Central Bldg., Oakland, Calif. 94612.

LUGERS, LUGERS; LISTING 35¢; Luger Tie Clasp \$250; Luger Manual \$1.10; Luger Stripping and Loading Tool \$1.50. Shattuck, Box 471, Franklin, Michigan.

GUN EQUIPMENT

AIR RIFLE EQUIPMENT: Free 1970 Handbook/Catalog covers finest European models, peliets, related accessories, Complete technical analysis, comparison, accuracy, ballistic information. World's largest dealer. Same day postpaid shipments. Satisfaction guaranteed, Air Rifle Headquarters, Grantsville. West Virginia 26147.

GUN SCREWS, GUN TAPS, GUN DRILLS, Loctite, Low Safetys. All in new catalog 26G. Plus help on how to select the proper scope mount for your rifle, Your copy is free, Just ask us. MAYNARD BUEHLER, INC., Orinda, Calif. 94563.

ATTENTION CHARCOAL BURNERS: Custom Holsters for Colts 1851 and 1861 Navies. Send Stamped Envelope for prices, descriptions. W. Craddock, 17695 Vista, Los Gatos, Ca. 35030.

GUNSMITHING

GUNSMITHING 30 years, military conversion; sporter stocks \$22,9.5; Rebineing \$12.50; Rebarreling \$24.95 up; Rechambering 30-06 to 300 magnum \$12.50. Bup; altered, forged, polished \$5.95. Alter, fewel - \$8.50 New handle \$7.50; Mannileier type \$8.95; jewelly \$4.00; Alter Japanese 7.7 to 30-06 \$6.95. 6,5 to 257 \$6.95. Jap parts. Catalog 15e. T-P Shop, West Branch, Michigan 48661.

GUN PARTS — Military-Commercial, Foreign-Domestic Thousands of Parts in Stock, Write your needs, stamped addressed envelope for reply, Illustrated Parts Catalog \$1.00. Southwestern Arms, Dept. G. 107 Logan Street, Brooklyn, New York 11208.

BUILD .22 Target Pistol, .22 Camper's Pistol, Gun Racks, Cablnets, and blue guns - with hand tools. Send 6e stamp for illustrated information, Post office Box 362-G, Terre Haute, Indiana 47808.

.44 CAL, DERRINGER, make it yourself! Complete, detailed instructions only \$2.00. Easy complete premachined kit with instructions \$10.50. Fernwood, 1725 Springbrook, Walmut Creek, Calif. 94596.

KNIVES & SWORDS

RANDALL MADE KNIVES for immediate delivery, Genuine, new, Florida manufacture. No catches, no gimnicks. You pay modest premium for immediate delivery. Several options each on all 21 models available. Catalog, lists, 50e, Airmalled, \$1,00. Vansickle, Drawer 3688-RG, San Angelo, Texas 76901.

KNIVES — 101 — Imported — Novelty Knives. Catalogue 50¢. Friedmar Imports, Box 533-G, Montebello, Calif. 90640.

MISCELLANEOUS

NAZI ITEMS Bought, Sold, Originals only, List 35¢. Lenkel, 1060 Anderson, Palisade, N.J. 07024.

CROSSBOWS for Target, Hunting and Carp-Shooting, \$18.95 Factory-Direct-Price, Jay Co., Rt. 3, Goddard, Kansas 67052

NAZI WAR SOUVENIRS, Latest filustrated catalog \$2.00 cash. Disco, Box 8035-M, Milwaukee, Wis. 53223

TREASURE HUNTERS! PROSPECTORS! Relco's new instruments detect buried gold, silver, coins, minerals, historical relics, Transistorized, Weighs 3 pounds, \$19,95 un. Free catalog, Relco-A6, Box 10839, Houston, Texas 77018.

TREASURE. Gold, Silver, Relics, New 1971 detectors now available. Free information. Excelsior Electronics Company, Dept. A. 7448 Deering Avenue, Canoga Park, California 91303.

EVERYBODY LIKES DIXIE GUN WORKS.

FREE CIRCULAR—Country Records and Tape Cartridges. Fiddle Tunes, Blue Grass, Etc. Uncle Jim O'Neal, Box A Gun, Arcadia, Calif. 91006.

GOVERNMENT SURPLUS fully Illustrated Catalog 35¢ listing individual Military Equipment — Clothing — Boots, etc. at bargain prices. Southwestern, Dept. G, 107 Logan Street, Brooklyn, New York 11208.

BUMPER STICKERS, DECALS, BUTTONS, Low-cost, custom-made advertising for your Business, Special Event, Organization or Political Campaign, Buy direct from manufacturer and SAVE! Write for FIREE Brochure, Price Lists and Samples, Please state intended use for appropriate samples, REFLECTIVE ADVERTIS, ING. INC., Dept. 6, 8551 Page Blvd., St. Louis, Mo. 63114, Phone (314) 423-5495.

GENUINE BUCKSKIN JACKETS and hundreds of unique leather items. Send 50¢ for buckskin money poke and big color catalog. Berman Buckskin Company, Dept. 32, Minneapolis, Minn. 55401.

SURVIVAL EQUIPMENT & SUPPLIES. Send 25¢ in coin for catalogue. Northwest Outfitters, P.O. Box 156, Mountlake Terrace, Washington 98043.

600 ASSORTED SWEET ONION PLANTS with free planting guide, \$4.20 Postpaid, Tonco, "home of the sweet onion," Farmersville, Texas 75031.

MAKE YOUR OWN KNIFE. Fine tempered and finished blades. Hunting, fighting, bowle models 440-C Stainless and Timken high carbon tool steel bar stock for full custom work. Stag, buffalo horn, exotic hardwood handles. Stainless, brass, aluminum butt caps, hilts. Spacers, rivets, epoxy, instructions, New Jarge catalog, 50e, Airmailed, \$1,00, Dick Vansickle, Box 3688-KG, San Angelo, Texas 76901.

WINEMAKING GRAPE, ELDERBERRY, DAN-DELION, Frozen Juices, Champagne. Brewmasters' Secrets Revealed! Powerful Methods! Instructions, Recipes and Supplies Catalog, \$1.00. Continental Box 11071-GU, Indianapolis, Ind. 46201.

FREE SPORTSMENS CATALOG: Low direct factory prices. Fishing, hunting, guns, ammo, reload, archery, clothing, snowmobiles, mini-bikes, gunstocks, ribs, decoys and camping supplies. HERTER'S INC., DEPT. CG, WASECA, MINN. 56093.

WANTED COMIC books, Playboys, Pulps, Big Little Books, Radio and Cereal Give-aways, comic toys and games, pre-1956. Send list of items you are selling with prices. Rogofsky, Box 1102, Linden Hill Flushing, N. Y, 11354.

30 CARTOONS For Redblooded Americans—Card Size—\$1.00 Postpaid. Arne Hultine, Box 4223, Pasadena, Calif. 91106.

GENUINE INDIAN Head Penny — 30¢. Morrill's, 269 Cox, Hudson, Mass. 01749.

AUTHENTIC AUSTRALIAN Hardwood BOOMERANG \$3.00 plus 25¢ postage. Marvin Gimeno, 24889 Muir Street, Hayward, Calif. 94544,

ALL NAZI ITEMS Bought, Jerry Behal, 86 Richard St., Johnson City, New York 13790.

REAL ESTATE

LAND! Easy terms less than bank rates. Northwest Timbered Acreages as low as \$1250 Total Price. 5-10-20-40 acres. For people who love the land - A tract of fecreation Land to have for your very own! In Northern Idaho, Northeastern Washington and Western Montana. In the heart of lakes and big gaine country. All covered with growing timber. Access and Title insurance with each tract. This is select land with natural beauty, recreational and Investment values. Plan for the future and retirement recreation. We have tracts of many types and sizes from which to choose, including beautiful Northwest Waterfront property. Your inspection is welcomed. Write us for free list, maps and complete information. Write to: Dept. RC, Reforestation, inc., Box 106. Opportunity Station. Spokane, Washington 99214.

GOVERNMENT LANDS . . . low as \$1.00 Acre! Millions Acres! For exclusive "Government Land Buyer's Guide" . . plus "Land Opportunity Review" listing lands available throughout U.S., send \$1.00. Satisfaction Guaranteed! United Lands. 19107-KD. Washington, D. C. 20005.

\$1 ACRE U.S.A. — CANADA — ALASKA. Millions Acres. Direct from Gout . . Family vacationing, hunting, fishing. Investing . . For amazing "where" and "how". "All States — All Canada Govt. Lands Digest" . . . plus invaluable Canadian maps. Rush \$1.00 (Guaranteed) & 25c handling costs. Can-Am Lands, Box 1147, Buffalo, N.Y. 14240.

GOVERNMENT LAND — Low as \$3.50 acre! Buy, lease, or homestead. For latest report, send \$1.00. NORCO, Box 1555-GM, Tacoma, Washington 98401.

HONGEN ET

TOP PLAIN CLOTHES POLICE, INVESTIGATORS

GRIP5

Hank Wiesner

48 Shepherd Avenue

Brooklyn, New York

FLEXIBLE ETHYLENE VINYL ACETATE CONTOUR MOLDED!

THUMB RELEASED TIE DOWN OVER HAMMER



Most practical field holster for SCOPED revolvers

> HANDGUNNER SCOPE Hutson Optics

Box. #1127

rlington; Texas

SEE PAGE 152 OF 1971 GUN DIGEST

WASHABLE, WON'T HOLD DIRT

OR WATER.

ULTIMATE IN COMFORT CONCEALMENT AND SPEED

"-extremely well made-" GUNS-Aug. 1970 GENE LOVITZ



MADE IN UNITED STATES OF AMERICA 1529 19TH STREET N. W. . CANTON, OHIO 44709.

NAME STREET STATE

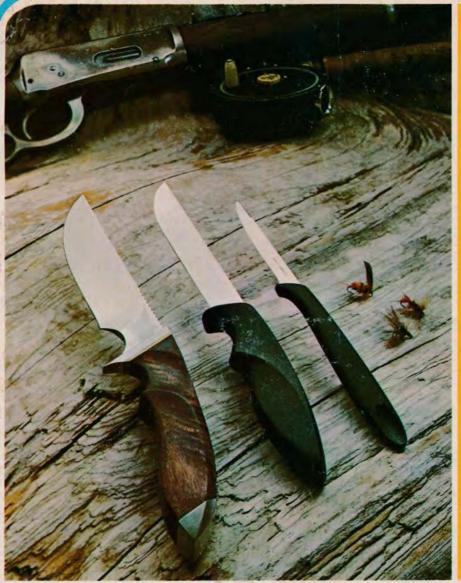
> Standard Target

POSTPAID

Ohio Residents add 4% State Sales Tax. Foreign orders add \$1.00 additional shipping.

- One size fits all barrel lengths—
- · Black -- (right hand only)
- Available in these models: 5&W Models #10, #12, #14, #15, #16 #17, #18, #19, #53

COLT Trooper, Official Police, Mark III HAWES (J. P. Sauer) Trophy & Medalion RUGER Security Six



America's finest hunting knives handcrafted by GERBER

ORDER BY MAIL Satisfaction Guaranteed

There's no match anywhere for Gerber Blades, Superior in design and performance, Gerber Hunting Knives are handcrafted from special steel: steel that takes and holds a keen cutting edge longer than other blades

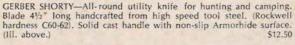
Gerber's new Presentation Series with power-grip walnut handle offers the ultimate for discriminating sportsmen who want the finest. Gerber's Armorhide® hunting knives have solid cast handles with non-slip surfaces and chrome plated high speed tool steel blades (Rockwell hardness C60-62). Other knives have Gerber's specially tempered 440-C stainless blades (Rockwell hardness C57-59) that resist rust and corrosion. Each knife complete with leather scabbard.



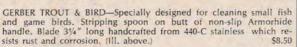
-Gerber Presentation Series. America's duty hunting knife. Hand rubbed walnut power-grip handle. Blade 51/4" long handcrafted from specially tempored 440 C. children long handcrafted from specially tempered 440-C stainless. Actual Rockwell hardness etched on each individual blade. (III. above.)



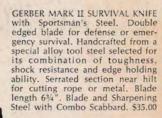
MODEL 4755-Gerber Presentation Series. Hunting and camping blade of superb quality. Hand rubbed walnut power-grip handle. Blade 4¾" long handcrafted from specially tempered 440-C stainless. Rockwell hardness etched on blade.



GERBER MINI-MAGNUM-Compact all-purpose hunting and camping knife. Blade 4" long handcrafted from high speed tool steel. Armorhide surface on solid cast handle. \$11.50



GERBER COHO—Specially designed for cleaning and filleting larger fish such as salmon and steelhead. Stripping spoon on butt of nonslip Armorhide handle. Blade 6" long handcrafted from 440-C stainless which resists rust and corrosion.



GERBER MARK II DIVE KNIFE-All of the features of the Survival Knife above, except with stainless steel blade that resists rust or corro-sion. Handy one inch markings etched on blade. Scabbard is tallow impregnated to resist repeated immersion in fresh or salt water. Available with choice of interna-tional orange or yellow non-slip Armorhide handle. Knife with Scabbard.

Specify handle color.



Dept. G-4 • 2899 South Sixth Street • Klamath Falls, Oregon 97601

ORDER BY MAIL TODAY ... include \$1.00 for postage and handling.

Send for new free catalog Explore Leisure the Western Way.