

December 7, 1971

Memorandum for File

Subject: GUNS; ARTICLES & ADVERTISEMENTS IN AMERICAN RIFLEMAN MAGAZINE

From: R. P. Smith

On December 6, 1971 I spent several hours at the Library of Congress examining back issues of various magazines in an effort to track down the source of the advertisement by Seaport Traders, Inc. (Los Angeles) from which Oswald purportedly clipped the mail-order coupon (CE 135) and ordered a revolver, supposedly received by him in March, 1963 about the same time as the rifle was delivered. While the mail-order coupon for the rifle purchase was identified as having come from the February 1963 issue of American Rifleman (WR, p. 119; see also Sylvia Meagher, AATF, pp. 48-50 for several pertinent observations on this, particularly footnote 4), there does not appear to have been any corresponding identification of the source of the coupon for the revolver purchase. This coupon bears the code designation "AM-3", which commonly (but not always) represents the initials of the name of the magazine plus the month of issue. Notwithstanding such a strong clue, identification of the magazine was not accomplished by the Warren Commission or, to the best of my knowledge, by anyone else. I searched early 1963 issues of American Rifleman, Field and Stream, Guns & Ammo, Sports Afield, and one or two others without success. (There appears to be no well-known gun or hunting magazine with the initials "AM", but I have not yet examined all the possibilities by any means.)

However, in examining back issues of American Rifleman I ran across some other information of possible interest in regard to the rifle, both in respect to the advertisements and in respect to certain technical articles about ammunition and silencers which could conceivably have been used in the JFK assassination, whether in conjunction with the Mannlicher-Carcano rifle or some other rifle. I have made copies of some of this information as attachments to this memo. The following discussion is keyed to these attachments.

1. Attachments 1 and 2 are copies of the ads placed by Klein's Sporting Goods in the January 1963 and February 1963 issues of American Rifleman, the latter being the one corresponding to the "Hidell" mail-order coupon as indicated by the code designation "Dept. 358" as seen in CE 773. (Klein's ran advertisements regularly in all the various magazines that I examined, and apparently they changed the code designation in numerical sequence each time.) As pointed out by Sylvia Meagher (AATF, p. 48), the rifle shown in the February 1963 ad differs very appreciably, both in length and in weight, from that which was actually shipped to "Hidell", and it was apparently some months later, as in the November 1963 issue of Field & Stream (shown in Holmes Exhibit No. 2), before Klein's got around to advertising the 40", 7 lb. rifle that seems to have been shipped to "Hidell" in March 1963. Of the many Klein's ads that I examined for the first six months of 1963, every one that included the "6.5 Italian Carbine" (which is most of them) referred to a 36" rifle weighing 5½ lbs. I have not yet determined when the first appearance of the longer & heavier rifle occurred, but it seems almost certain that it was not before July 1963.

The possibility exists that Klein's exhausted their supply of the shorter rifle as early as March 1963 (resulting in a substitution being made in the "Hidell" shipment), but that the advertising department didn't get the word until later. Then too, "hobby" magazines of this type frequently are published a month or two ahead of their nominal issue dates, and the advertising copy has to be submitted well before the publication date. However, the tone of these ads ("LATE ISSUE", etc.), which was consistent all the way until June at least, seems to imply that a real effort was made to keep them current. Moreover, there is nothing in these ads to suggest that Klein's followed the practice of making substitutions without notifying the purchaser first.

RPS, 12/7/71

2. Attachment 3 is an article from the January 1963 issue of American Rifleman on the subject of explosive bullets. Bullets of this type genuinely explode on (or just after) impact; they are not mere "dum-dum" or inert fragmentation bullets. There is surprisingly little information on this type of ammunition in ordinary reference works (e. g., Encyclopaedia Britannica), although one can find a great deal of information about explosive ordnance for larger caliber weapons.

This article is the first positive confirmation that I have found showing that ammunition of this type is practical for standard rifle calibers. It may be significant that all the developments described in the article are of World War I vintage. I assume such ammunition, like dum-dums, was banned by the Geneva Conventions (1920's), although obviously this would not deter assassins.

It is interesting that several nations, including the U. S., have had such ammunition in their arsenals in the past, and that Italy in particular (p. 24 of the article) had an explosive bullet for 6.5 mm weapons. Although the bullets, as shown in the chart, are often of distinctive shapes or bear distinctive markings, the cartridge cases appear to be of standard design in many cases. In several instances, the only distinguishing feature may be a color marker of some kind, which of course could be removed. Thus the characteristics of the cartridge cases would not be a reliable guide as to the nature of the bullet. (A subsequent article by the same author in the March 1963 issue dealt with "incendiary" bullets and brought out exactly the same problem in identifying those.) Note also that some American manufacturers (Remington, Winchester, & Frankford Arsenal) were involved in the fabrication of explosive bullets, in one instance on behalf of a hostile foreign nation (Austria) in World War I, incredible as that may be. The author of the article presents this information very matter-of-factly in the third column of p. 22.

I am unable to estimate just what kinds of fragment or residue such bullets would leave in or near the target. My hunch is that the fragments would tend to be very small particles or slivers, but much depends on the nature, amount, and physical design of the explosive charge. Conceivably, in some designs, the bullet might disintegrate somewhat like a grenade, producing several "chunks" rather than tiny particles. In any case, I would expect that ballistic identification would be rather difficult. Moreover, the larger particles would probably be dispersed to appreciable distances in all directions rather than following the approximate flight-path of the initial trajectory.

Considering how old the information in this article is, and how many advances in technology have occurred since World War I, one can only speculate what kinds of new development in explosive ammunition may have taken place in recent years. Such developments would almost certainly have been kept well hidden under the cloak of security classification in view of the existence of international agreements to restrict the use of such weapons.

3. Attachment 4 is a short article from the same issue on "silencers". Again, as the article notes, there are problems in getting information on this subject. However, their existence for rifles as well as handguns is confirmed by this article, even though their effectiveness for rifles is somewhat dubious. It may be worth noting that even though the "crack" of a supersonic bullet cannot be silenced, the muffling of the sound from the muzzle (or chamber) might be of considerable value in concealing or disguising the location of the rifle to ear-witnesses. The marked paragraph in the second column is also of interest in showing that security classification enters into the question of availability of information on these devices. The reference to "semi-military purposes" is especially intriguing.

4. All of this information was published in the same magazine, and at about the same time, as that from which Oswald purportedly clipped a Klein's coupon and ordered the Mannlicher-Carcano rifle in March 1963. This was well before he could have seen the magazines at the Crescent City Garage in New Orleans (CE 1933).

RECEIVED TOO LATE FOR HUNTING SEASON KLEIN'S LOSS IS YOUR GAIN! SAVE NOW! BUT HURRY!

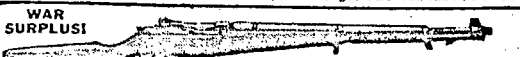
Cash or Credit
NO
MONEY DOWN
30 DAY FREE TRIAL

PRICE
SLASHED!



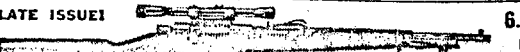
U. S. SPRINGFIELD M1903-30/06
SPRINGFIELD M1903'S! LIMITED QUANTITY! Most popular military rifle for sporting use of them all... and this lot are all Model 1903-A1's with high number Nickel-Steel receivers, milled working parts. Made in Government Arsenal—most commercially assembled. 30-06 caliber—3-shot magazine. Adjustable rear leaf sight, blade front sight. 43 1/4" overall. 8.69 lbs. American Walnut stock. Good to Very Good Condition.
C20-T130X. Prepaid **\$36.38**
E20-T1000. AMMO. 30/06 156 gr. 120 rounds. . . . \$7.20

WAR
SURPLUS!



U. S. M-1 GARAND RIFLE
Finest lot we've seen! Limited quantity! Famous World War I automatic rifle in popular 30/06 caliber. All in NRA Very Good Condition or better. 8-shot, 24" barrel, 42" overall. Adjustable sight. C20-T25. Only **\$7995**
GARAND IN "LIKE NEW" CONDITION. All specially selected and certified perfect by Milt Klein! . . . Order now, these won't last!
C20-T118. **\$8995**
E20-T1000. Military 30/06 Ammo, per 120 rds. \$7.20.

LATE ISSUE!



6.5 ITALIAN CARBINE
Only all-steel use, lightly oiled, test fired and head spaced, ready for shooting. Turned down bolt, thumb safety, 6-shot, clip fed. Rear open fast loading and fast firing. C20-T119G. Specially Priced. **\$12.88**
C20-T750. Carbine with Brand New Good Quality 4X Scope—1/4" diameter, as illustrated. **\$19.95**
E20-T751. 6.5 mm Italian military ammo with free 6-shot clip, 100 rds. \$7.50

**SPECIAL PURCHASE! TOP QUALITY!
TASCO VARIABLE POWER SCOPE! . . . 3X TO 9X**
Brand new! . . . First quality! . . . Made by Tasco! With a twist of the wrist you can have any power you want from 3 to 9. Field of view 14 ft. to 30 ft. Crosshair reticuled. Magnesium fluoride coated lenses, windage and elevation click stops, parallax corrected, nitrogen filled for fog proofing. Large eye piece and objective. 1" tube, wide lens caps. Overall 12". 14-oz. Compare to \$69.95 Scopes Elsewhere! B20-T693X. Prepaid **\$34.88**
VARIABLE POWER SCOPE . . . 2 1/2X to 8X TASCO quality features same as B20-T693 described above. Crosshair reticule. Compare to \$49.95 Scopes elsewhere! B20-T1285X. Prepaid Price **\$29.88**
2 1/2X or 4X SCOPES—CROSSHAIR or POST and CROSSHAIR RETICULE. All the quality and features of B20-T693 described plus fixed reticules—always accurately centered. Compare at \$37.50 elsewhere! State choice of reticule. B20-T1187X. 2 1/2X or 4X. State choice. Prepaid Price **\$19.88**
\$189.50 Value!

SAVE \$60 NOW! But hurry they won't last! Brand new! Famous Firearms International MATADOR 10-gauge (3 1/2" shell) Magnum Shotgun. Deep cut price due to slight change in forthcoming model. Made for F. by Ryan of Spain. Perfect for ducks and geese to 100 yds., for fox and varmint. Shoots 27" or 3 1/2" Magnum shells. 32" full choked barrels. Engraved receiver, selective automatic ejectors. 49" overall. 9 1/2 lbs. **\$129.50**
C20-T72. Certified \$189.50 Mfr's List. . . .
E20-T73. 10 Ga. 3 1/2" Magnum Shells, specify BB, #2 or #4 shot, \$7.20 for 25. Ammo shipped Express Collect.

SAVE OVER \$40. Brand new Winchester Model 50 FEATHERWEIGHT Automatic Shotgun. Factory packed. Latest Model. 12 gauge, 30" barrel, full choke, 3-shot. Easy, fast breakdown. Select Walnut stock. Weighs only 6 1/2 lbs. 49 1/2" overall. **\$98.77** plus \$1.50 postnote and handling
C20-T1387.


SAVE! DE LUXE GUN CABINET
Your Choice of Genuine Walnut or Lined Oak
Completely assembled and finished. Beautifully made of cabinet hardwood with ruberized interior. Keeps your guns safe, dresses up your den. Holds 8 guns. Barrel racks and stock pits green felt lined. Full width drawer holds accessories. Locks for sliding glass doors and drawers. 65 1/2" x 28" x 12 1/4" deep. State choice of genuine Oak with inlay. Only finest beautiful rotary cut Walnut. Expedited Frt. Collect from Indiana. WL 77 lbs. Certified \$95.95 Mfr's List. #E20-22. **\$67.77**

ALASKAN WOLF FUR PARKA
Ideal for Hunting, Skiing, Ice-Fishing, Outdoor Work and Camping. Luxurious Alaskan Wolf Fur Trimmed Hood, as used by the U.S. Army, Arctic Expedition. Water and Snow Repellent and Windproof. Double Ply finest Dupont Nylon in and out. Snap Proof! Parka has concealed knit wrists. Genuine Dupont 6-oz. Virgin Dacron Polyester Fiberfill Quilted Insulation! Warm as toast. . . . Light as a feather. Drawstrings on hood and at waist. Convenient large hand warmer pockets. State choice of Tan or Red. Sizes for all! Slipover hood. **\$14.99** (all \$1.00 P.P. etc.)
E20-T21—MEN: State suit size (34-48). LADIES: State dress size (10-20).
SALE PRICE

SALE! GOVT SHOE PACS
Brand New! Best U. S. Govt \$14.90! Heavy oil-tanned waterproof cowhide uppers securely attached to all rubber; fabric lined bottoms. Cleated soles. Rugged laces. 2 pair felt in. Oversoles included. Sizes 8, 10, 11, or 12. **\$4.99** Add \$1.00 Pr. Handling
E20-T46. State size, only. . . .

NEW! FINEST 9 TRANSISTOR WALKIE-TALKIE
Perfect for Hunters, Fishermen, Farmers, Campers, Police Work, Contractors, Surveyors, TV Repairmen!
Anyone Can Use. . . No License Required. . . FCC Approved!
Small enough to hold. . . light enough for your pocket. . . yet ranges up to 4 miles! 9-transistors in each unit for clear performance for the serious minded outdoorsman and outdoor worker. Do not confuse with "gimmicked-up" items having battery wearing radio and other gadgets. Easily operated with push-to-talk switch, volume control, telescoping chrome antenna. 7 night batteries included. . . cheaply and easily replaced anywhere. Plays to 1500 hours intermittently. Rugged grey metal housing with baked-on crinkle finish. 2 1/2" x 3 1/2" x 6 1/2". Weighs 2 1/4 lbs. Genuine leather case, straps, and great gift-in-a-lovely gift container. CLIP THIS DOWN or the amazing FREE GIFT!
FP90-T9157—Each MAYFAIR Walkie-Talkie. . . . **\$49.88**
Save More! 2 Walkie-Talkies, both for only. . . . **\$88.88**

WAR SURPLUS!
ALL MILLED PARTS—
ALL N.R.A. Very good
or better!



U.S. MODEL 1917 RIFLE
30/06 CALIBER
The U. S. Model 1917 Enfield 30/06 caliber. Known supplies are very limited—more are not likely to be available!
Top gun authority Major General Julian S. Hatcher in a typical Mauser, it was improved in several respects, and has a bolt and receiver of high grade Nickel steel that gave it a superbly strong action." General Hatcher further says—"many tests over the years have shown the Model 1917 barrels will always outwear the .03 Springfield barrels."
Specifications: 6-shot, top loading, 1 in 10" 5-groove 26" barrel with sharp clean rifling, rifle action 45.3", peep sight adjustable from 200 to 1600 yards, blade front sight, foolproof or felly. Turned down bolt. American Walnut Stock and hand guard
C20-T33. M1917 Rifle made by Eddystone. . . . \$29.88. C20-T34. Made by Remington or Winchester. . . . \$34.90.
C20-T36. M1917 Rifle made by Eddystone mounted with a Tasco 3/4" 4 power scope. . . . \$39.90.
C20-T1297. M1917 Rifle made by Remington or Winchester mounted with a Tasco 3/4" 4 power scope. . . . \$44.90.
C20-T1292. M1917 Rifle made by Eddystone mounted with the big 1" Tasco 4 or 6 power scope. . . . \$50.80.
C20-T1293. M1917 Rifle made by Rem. or Win. side mounted with the big 1" Tasco 4 or 6 power. . . . \$64.80.
C20-T689. Leather lace-on cheekpiece & sling. \$3.95 E20-T1000. 30/06 Metal jacketed ammo. 120 rds. \$7.20

**BRAND NEW!
FIRST QUALITY!
30-30 or .35 Rem.**
DELUXE MARLIN 336G!
With RECOIL PAD . . . SLING SWIVELS . . . THESE MARLINS ABSOLUTELY BRAND NEW, factory packed, with full Marlin warranty. Famous Marlin fast short throw lever action. Tubular magazine holds 7 shots. Famous Marlin Micro-Grooved barrel. Hooded ramp front sight, adjustable open rear sight, receiver drilled tapped for all popular scope sling swivels and oiled leather sling with brass-fittings. State choice of 30/30 or .35 Remington caliber.
C20-T773. Certified \$94.95 Mfr's List. State 30/30 or .35 cal. . . . **\$69.88**
MARLIN 336G WITH 4X SCOPE—Mounted . . . Ready to shoot! Famed Tasco fine quality 1 1/2" diameter 4X Scope with hard coated, magnesium fluoride lenses, click stops for windage and elevation adjustments. Tip-off mounts for quick, simple scope removal. Scope is nitrogen filled to prevent fogging. Leather lens caps included. Scope has crosshair.
MARLIN 336G 4X SCOPE, MOUNTS, RECOIL PAD, CARRYING STRAP, SWIVELS. Compare at \$139.70 \$94.88 elsewhere! C20-T774. State 30/30 or .35 cal.
MARLIN 336G WITH 2 1/2X to 8X SCOPE. Mounted . . . Ready to Shoot! Tasco fine quality variable power scope changes power from 2 1/2 to 8 instantly. Nitrogen filled, magnesium fluoride coated lenses, cross hair reticule, 1 1/2" lens caps, tip-off mounts, 500 yd. butt-plate. 10-shot removable clip, sling swivels. 44 1/2" overall. 303 British Caliber.
C20-T1253. Rifle
ENFIELD RIFLE WITH FLEETWOOD 4X SCOPE, 3/4" diameter. Mounted—Ready for Shooting! \$19.88
ENFIELD RIFLE with new TASCO 4X Scope, illustrated, 1" diameter, crosshair reticule. Mounted. \$27.88
Ready for Shooting! Leather Carrying Strap included! C20-T993. . . . \$44.88
E20-T1339. . . . 303 Br. Military Ammo, per 100 rds. . . . \$7.50

**SPECIAL
WAR SURPLUS PURCHASE!**
.303 British Caliber
AVAILABLE WITH OR WITHOUT SCOPES . . .
Amazing low price due to huge special purchase from British Ministry! The finest lot of Enfield No. 1, Mark III rifles we've seen long, and possibly the last of this quality that may be available for a long time! Buy with complete assurance your gun will be mechanically perfect. . . . with clean sharp rifling. . . . with smooth, oiled fine-grained Walnut stock with little appreciable wearing of wood. Sporterized stock has good clean lines, balances well—permits fast handling. Rear sight adjustable for windage and elevation, blade front sight, turned down bolt handle, 10-shot removable clip, sling swivels. 44 1/2" overall. 303 British Caliber.
C20-T1253. Rifle
ENFIELD RIFLE WITH FLEETWOOD 4X SCOPE, 3/4" diameter. Mounted—Ready for Shooting! \$19.88
ENFIELD RIFLE with new TASCO 4X Scope, illustrated, 1" diameter, crosshair reticule. Mounted. \$27.88
Ready for Shooting! Leather Carrying Strap included! C20-T993. . . . \$44.88
E20-T1339. . . . 303 Br. Military Ammo, per 100 rds. . . . \$7.50

**NEW HI-STANDARD
.22 RIFLING**
Shoots .22 rim-fire from 88" Cap to Long. 10 1/2" overall. Hammerless. Two Shots. Dual Extraction. Weighs only 11 oz. **\$29.95**
E20-T1340

**.38 S & W ENFIELD
M1917—COLT .45**
Double action only. 26 oz. 6 shot. 10 1/2" overall. Hinged frame. break-open action, fixed sights, hard rubber grips. Good condition outside. Perfect mechanically.
E20-T97. Only. . . . **\$12.98**
Add \$3.00 for special selection if desired.
MAIL TODAY! IMMEDIATE DELIVERY!
KLEIN'S Dept. 323
Our 76th Year of Quality
227 W. Washington St.
Chicago 6, Illinois
CASH CUSTOMERS: Send check or money order in full. Add only \$1.50 per any size order for postage and handling unless otherwise specified. Handgun orders, and orders with ammo, are shipped express, charges collect. (Illinois customers only—add 4% Sales Tax.)
C.O.D. Customers—Enclose 10% C.O.D. Deposit.
ESTABLISHED KLEIN'S CREDIT CUSTOMERS: No down payment required. Your order will be shipped at once.
NEW CREDIT CUSTOMERS: No Down Payment Required. To speed your order, send name and address of your Employer, with name and address of employer, name of whom you have (or have had) credit accounts. Also your age, occupation, number of dependents, date present job began and present salary. Information will be kept confidential. (Pay balance, plus small shipping and service charge, monthly.)
RUSH ITEM NOS.
ENCLOSED IS \$ Check Money Order
NAME _____
ADDRESS _____
CITY & STATE _____
100% MONEY BACK GUARANTEE!

NEW! '63 GUN DIGEST
World's Greatest GUN BOOK
Now with 5 FREE **\$3.95**
Extras! \$11.90 Val. **\$3.95** P.P.D.

FREE GIFT!
FAMOUS "SPRAY" PERFUME
In unique Self-Contained Atomizer! Milt Klein's Gift to you, for your Lady Fair, with any purchase of \$9.95 or more from this ad. Spray Flacon gives 1500 "sprays" of enchanting perfume. A great value and a great gift—in a lovely gift container. CLIP THIS DOWN or the amazing FREE GIFT!

RECEIVED TOO LATE FOR HUNTING SEASON KLEIN'S LOSS IS YOUR GAIN! SAVE NOW! BUT HURRY!

Cash or Credit
NO
MONEY DOWN
30 DAY FREE TRIAL

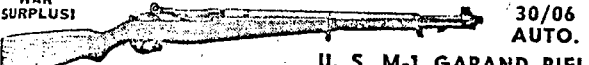
PRICE SLASHED!



U. S. SPRINGFIELD M1903—30/06
LIMITED QUANTITY! Most popular military rifle for sporting use of them all. This lot are all Model 1903-A1's with high number Nickel-Steel receivers, milled working parts. Made in Government Arsenal—Not commercially assembled. 30/06 caliber, 5-shot magazine. Adjustable-rear leaf sight, blade front sight. 43/4" overall, 8.69 lbs. C20-T1340X. Prepaid \$36.38

E20-T1000. AMMO. 30/06 156 gr. 120 rounds... \$7.20

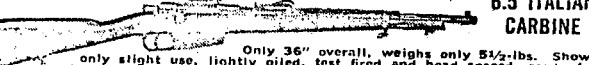
WAR SURPLUS!



U. S. M-1 GARAND RIFLE
30/06 AUTO.
Finest lot we've seen! Limited quantity! Famous World War II automatic rifle in popular 30/06 caliber. 8-shot, 24" barrel, 42" overall. Adjustable sight. Rear open bolt. Certified perfect by Bill Klein! Order now, these won't last!
C20-T1118. \$89.95

E20-T1000. Military 30/06 Ammo, per 120 rds. \$7.20.

LATE ISSUE!



6.5 ITALIAN CARBINE
Only 36" overall, weighs only 5 1/2 lbs. Shows shooting accuracy in popular 30/06 caliber. 8-shot, 24" barrel, 42" overall. Adjustable sight. Rear open bolt. Certified perfect by Bill Klein! Order now, these won't last!
C20-T1118. \$89.95

E20-T1000. Military 30/06 Ammo, per 120 rds. \$7.20.

SPECIAL PURCHASE! TOP QUALITY! TASCOS VARIABLE POWER SCOPE! . . . 3X TO 9X

Brand new! First quality! Made by Tascos! With a twist of the knob you can have any power you want from 3 to 9. Field of view 14-1/2" to 30-ft. Crosshair reticle. Magnesium fluoride hard coated lenses. Windage and elevation click stops. Parallax corrected, nitrogen filled for fog proofing. Large eye piece and objective. 1" tube, cowhide lens cap. Overall 12" long. Compare to \$69.95 Scopes Elsewhere! **B20-T693X. Prepaid \$34.88**

VARIABLE POWER SCOPE 2 1/2X to 8X TASCOS quality and features same as B20-T693 described above. Crosshair reticle. Compare to \$49.95 \$29.88

2 1/2X or 4X SCOPES—CROSSHAIR or POST and CROSSHAIR RETICLE. All the quality and features of B20-T693 described plus Fixed Reticle—always accurately centered. Compare at \$37.50 elsewhere! State choice of reticle. B20-T1187X. 2 1/2X or 4X. State Choice. Prepaid Price. \$19.88

\$189.50 Value!

SAVE \$50 NOW! But HURRY—they won't last! Brand new famed Firearm International ATADOR 10-gauge (3 1/2" shell) Magnum Shotgun. Deep cut price due to slight change in forthcoming model. Made for F-1 by Avia of Spain. Perfect for ducks and geese to 100 yds. for fox and varmint. Shoots either 2 7/8" or 3 1/2" Magnum shells. 32" full choked barrels. Engraved receiver. Windage and elevation click stops. Double safety under-barrel. 9 1/2" lbs. C20-T772. Limited \$149.50 Mfr's List. \$129.50

E20-T73. 10 Ga. 3 1/2" Magnum Shells, specify 10, 12 or 14, \$7.20 for 25.

SAVE! NEW WINCHESTER FEATHERWEIGHT AUTO SHOTGUN

SAVE over \$40. Brand new Winchester Model 50 FEATHERWEIGHT Automatic Shotgun. First quality, factory packed. Latest Model, 28 gauge, 30" barrel, full choke, 3-shot. Easy, fast takedown. Select Walnut stock. Weight only 6 7/8 lbs.; 49 1/2" overall. \$98.77 plus \$1.50 postage and handling

C20-T1347.

BRAND NEW! U.S. M1 .30 CALIBER CARBINE

The Rifle Every G.I. Wants! Buy Now! The only U.S. Military small arms made with the lines and weight of a modern sporter. Weighs only 5 1/2 lbs., 31" barrel, 30" overall. Gas operated. 5-shot magazine. Receiver sight adjustable from 100 to 300 yds. New Condition! Superbly accurate, 100% dependable. **\$78.88**

C20-T859-7. Brand New M-1 Carbine, Fully Nickel Plated. \$119.95

F20-T32. 15-shot Magazine, 3 for \$1.00.

F20-T33. 15-shot Magazine, 3 for \$1.00.

F20-T34. 15-shot Magazine, 3 for \$1.00.

F20-T35. 30-shot Magazine \$2.95; Minimum order \$5.00.

Listen to London . . . Tokyo . . . Moscow . . . Ships at Sea . . . Planes . . . Astronauts!

FAMOUS VISCOUNT

SHORTWAVE-AM-MARINE PORTABLE RADIO!

Plays Over 300 Hours on Inexpensive Flashlight Batteries! Includes Genuine Cowhide Leather case with Carrying Strap and Earphone for Private Listening! Famed VISCOUNT Quality!

- 8 Transistors—3 Diodes
- Powerful Telescopic Antenna
- Conceals in Case
- Console Sound 3 1/2" Dynamic Speaker
- "Meter-Miser" Battery Saver
- Precision Slide-Rule Tuning
- "OR" Pilot Light for Night Tuning
- "Sep-urate Tone Control"
- "Long Range" or "Local" Power Switch
- Plays Perfectly Anywhere!
- As Advertised in LIFE. Guaranteed by Good Manufacturing Management.

COMPARE AT \$59.95 ELSEWHERE!

Receives all standard AM broadcasts plus Shortwave 6-18 Megacycles and Marine Band 1.6-4.5 Mc. Operates on 4 standard flashlight batteries. Weighs only 2 lbs., 10 oz. Showpiece black and chrome cabinet measures only 4 3/4" x 8 1/2" x 1 1/4".

FP90-T9740 \$39.95

KLEIN'S LOW PRICE . . .

NEW! FINEST 9 TRANSISTOR WALKIE-TALKIE

Perfect for Hunters, Fishermen, Farmers, Campers, Police Work, Contractors, Surveyors, TV Repairmen! Anyone Can Use. . . No License Required. . . FCC Approved!

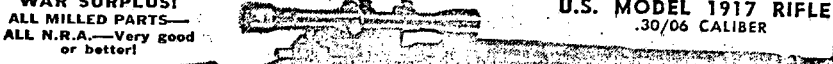
FAMOUS "MAYFAIR" BRAND!

Small enough to hold . . . light enough for your pocket . . . yet ranges up to 4 miles! 9-transistors in each unit for clear performance for the serious minded outdoorsman and outdoor enthusiast. Do not confuse with " gimmicked-up " items having battery wearing radios and other gadgets. Easily operated with push-to-talk switch, volume control, telescoping chrome antenna. 7 neonight batteries included. Cheaply and easily replaced anywhere. Plays to 1500 hours. Intercom. Rugged grey metal housing with baked-on crinkle finish. 2 1/2" x 1 1/2" x 6 1/2". Genuine leather case, straps, handle. Private telephone with leather case included. Shipped Postpaid during Sale only!

FP90-T9715T—Each Walkie-Talkie. \$49.88

Save More! 2 Walkie-Talkies, both for only. . . \$88.88

WAR SURPLUS! ALL MILLED PARTS—ALL N.R.A.—Very good or better!



U.S. MODEL 1917 RIFLE .30/06 CALIBER

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RIFLE CALIBER EXPLOSIVE CARTRIDGES

By CHARLES H. YUST, JR.

RIFLE-caliber explosive cartridges form a very interesting group which it is quite possible for anyone to add to his collection. It is only necessary that extreme caution be practiced when encountering any cartridges of which there is the slightest doubt as to identity, especially those that have unusual-appearing bullets.

While explosive cartridges are safe enough to have in a collection, the nature of this type of ammunition must always be borne in mind, along with the possible effects of time.

Never probe bullets

Some of this class are of hollow- or open-point type. Never, under any circumstances, thrust any object down this opening. Never use pliers or other tools on bullets that have copper or lead tubes in the nose, or use tools on those with mechanisms, such as the U. S. Spot-Light types or the Austrian Anti-Balloon Round.

Do not drop explosive cartridges. While they are intended to withstand ordinary handling in the field, age may have had a deteriorating effect on some of the components, and a drop may be enough to explode them. Also, do not use an inertia-type bullet puller—the blows could be enough to actuate the mechanism.

Some collectors like to section bullets to study their construction. Unless you are well versed in such procedure and have the proper safety equipment, confine this sectioning to the large variety of inert-type bullets. Those who like to shoot should refrain from firing explosive cartridges.

The Argentine 7.65 mm. Type R high-explosive cartridge (Fig. 1) is identified by a black bullet tip and black primer annulus. Bullet jacket is cupronickel clad steel. The round was manufactured for Argentina by Hirtenberg Patronenfabrik in Austria.

So far as known to this writer, Austria had in service 4 types of explosive

cartridges for 8x50R Mannlicher rifles and machine guns. All these were used in World War I, and one of them was introduced as far back as 1910.

Explosive cartridges Model 1910 and Model 1914 (Fig. 2) are known as *Einschusspatronen* (sighting cartridges), intended for observing point of impact, supposedly in training. They were manufactured at the government arsenal at Wellersdorf.

These are very hard to distinguish from the ordinary ball round as the bullet has the same general shape. For identification a colored band was placed around the cartridge case just below the shoulder. However, this band could be worn off. If the bullets are removed from the case, it will be noted that they are considerably longer than the ordinary ball bullet.

The Model 1910 cartridge has a red band around the cartridge case. The bullet jacket is gilding metal, but coated so that it looks like the ordinary steel-jacketed ball bullet. The portion of the bullet seated below the case mouth was not coated. The base of the bullet is

marked —. The explosive in this cartridge

consists of potassium chlorate and antimony sulphide.

Model 1914 cartridge

The Model 1914 cartridge has a black band, and the bullet jacket is steel. The nose of this bullet has a small, flattened projection which is also an aid in identification. Base of the bullet is marked —. The explosive is compressed blackpowder mixed with aluminum.

The third cartridge in the Austrian series is known as an air burst shrapnel (Fig. 3). It appears to have been introduced later in World War I, because the cartridge is headstamped 1917. It can be identified by the flat-nose, hollow-point bullet. The mouth of the cartridge case is crimped. In 1917 a crimp

to hold the bullet more tightly was included for use in machine guns.

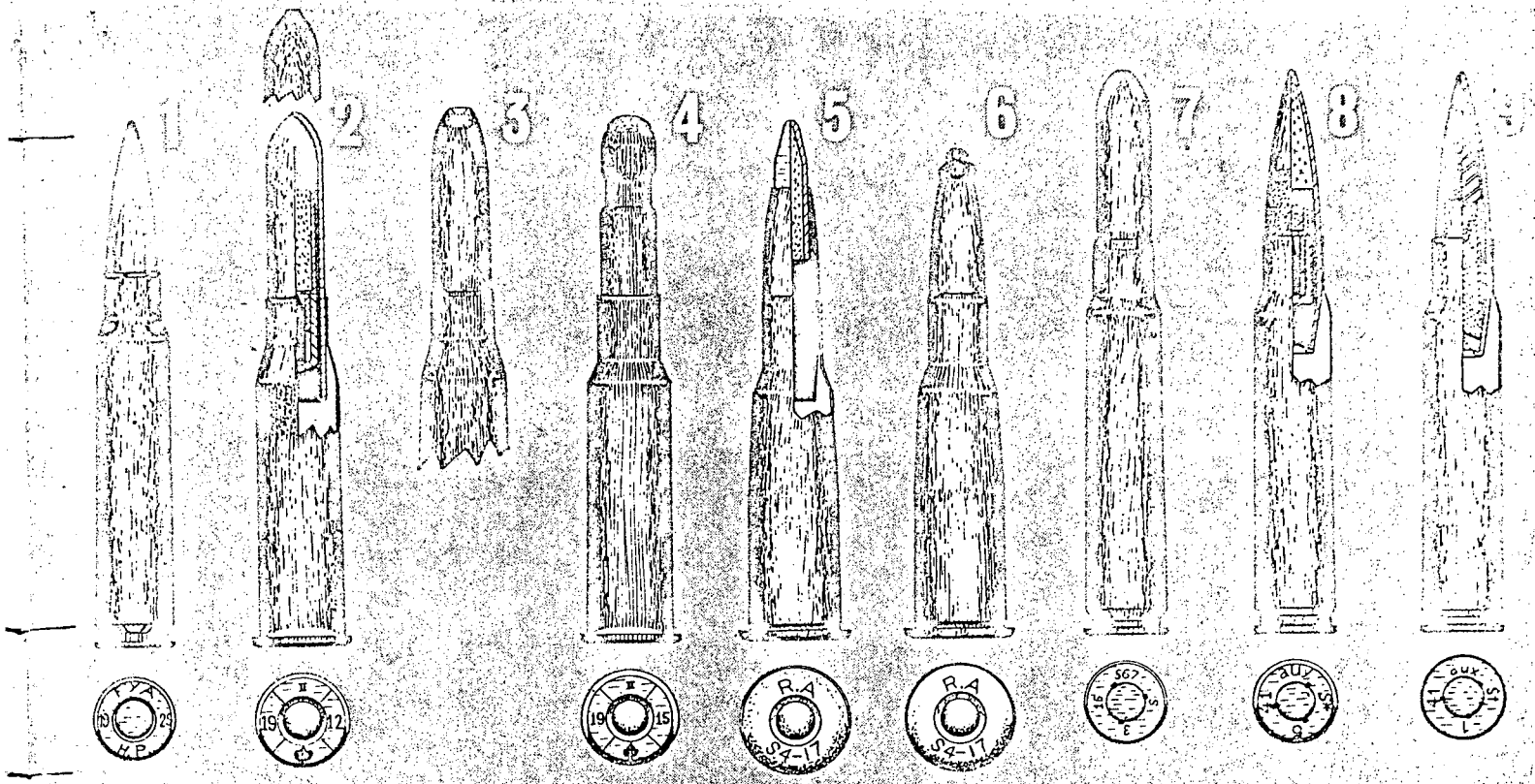
The last of the Austrian cartridges is known as an anti-balloon round. There were 2 patterns, which at first glance look alike as they have practically the same external dimensions. The first pattern (Fig. 4) is headstamped "1915" and the bullet length is 1.425". The cartridge case is not crimped to hold the bullet. The second pattern is headstamped "1916" and the bullet length is 1.305". The cartridge case is crimped to the bullet. Shape of the case for this round is slightly different from that of other 8x50R Mannlicher rounds. It is still 50 mm. long, but the neck was made longer by shortening the shoulder, to give more bearing surface around the bullet. It is not known certainly if this cartridge was intended for use in rifles, in machine guns, or both. The first time this writer saw such cartridges they were loaded in a number of regular Mannlicher rifle clips.

There are 2 patterns of spot-light cartridges in 8 mm. Lebel. The first pattern has a hollow lead-pointed insert in the bullet nose (Fig. 5). The explosive must be sensitive, as it detonates on impact. The second pattern (Fig. 6) has an unusual appearance. The explosive is placed in the cavity in the bullet nose and the cavity soldered closed.

The cartridge cases were made by Remington Arms-Union Metallic Cartridge Co., at their Swanton, Vt., plant. The bullets were altered from the regular solid *Balle D*. The first pattern was altered and loading completed at Frankford Arsenal; it is not known where the second pattern was completed.

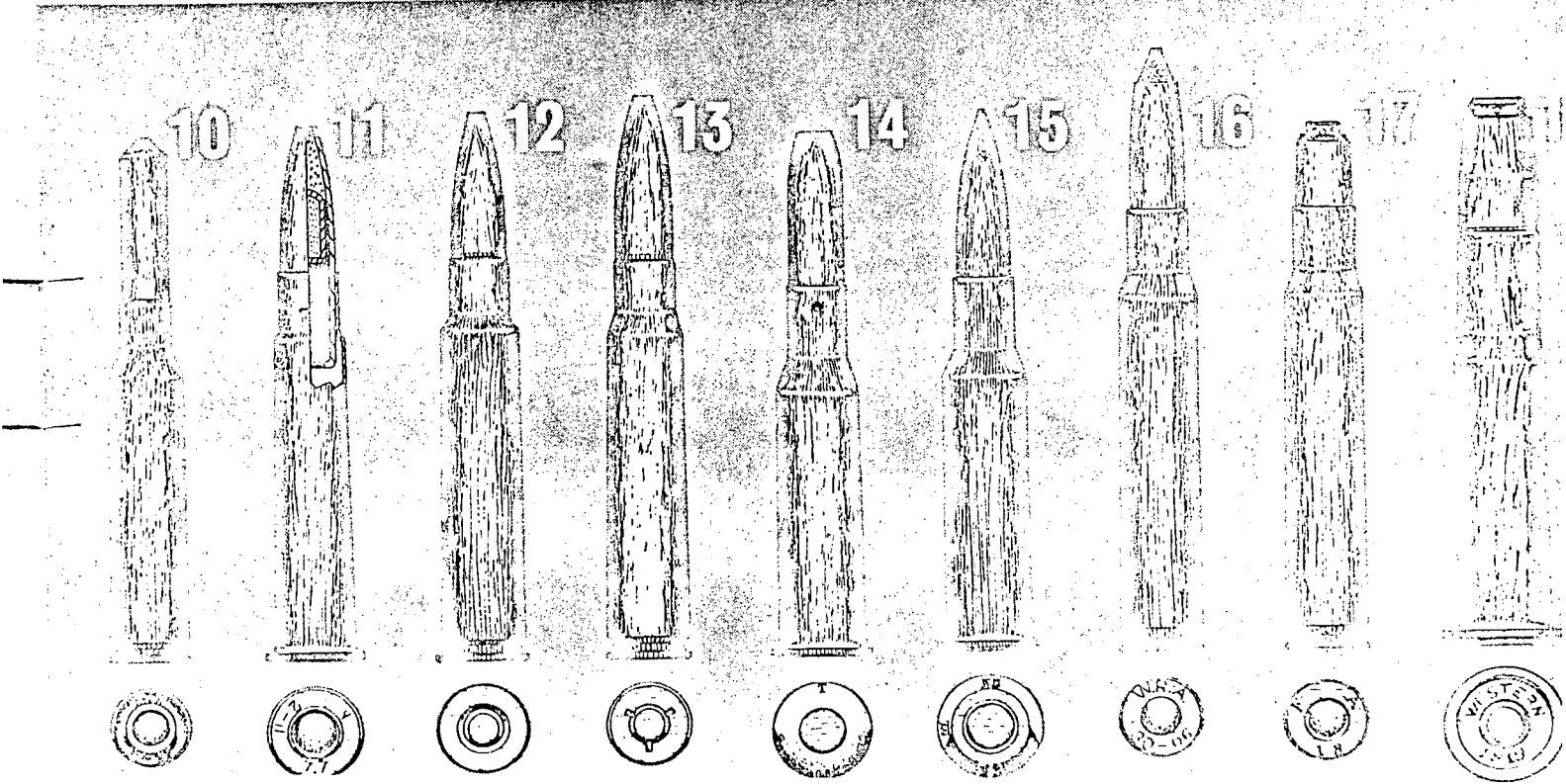
Three German explosive types follow. A 7.92x57 mm. explosive round was introduced during World War I (Fig. 7) which, at first glance, could be mistaken for the old Model 1888 round-nosed ball cartridge. However, the bullet has a hollow point and the bullet

Continued on page 24



FIGURES

- 1 Argentine 7.65 mm. Type R High Explosive Cartridge
- 2 Austrian Sighting Cartridges. (at top) Model 1914. (below) Model 1910
- 3 Austrian Air Burst Shrapnel Cartridge (bullet only)
- 4 Austrian Anti-Balloon Cartridge
- 5 8 mm. Lebel 'Spot-Light' Cartridge, first pattern
- 6 8 mm. Lebel 'Spot-Light' Cartridge, second pattern
- 7 German 7.92x57 mm. Explosive Cartridge, World War I
- 8 German 7.92x57 mm. *B-Patrone* Observation Cartridge
- 9 German 7.92x57 mm. "S.m.K. L'spur Ub. m.Z." (Practice Ball with Steel Core and Self-Destroying Tracer)
- 10 Italian 6.5 mm. Explosive Cartridge
- 11 Japanese Navy 7.7 mm. Rimmed Explosive Cartridge
- 12 Japanese Army 7.7 mm. Semi-Rimmed Explosive Cartridge
- 13 Japanese Army 7.92x57 mm. Explosive Cartridge
- 14 Imperial Russian 7.62 mm. Explosive Cartridge
- 15 Soviet Russian 7.62 mm. Explosive Cartridge
- 16 U. S. .30 Gov't M1906. H.E. 'Pomeroy' Explosive Cartridge
- 17 U. S. .30 Gov't M1906, H.E. 'Spot-Light', Experimental Cartridge
- 18 U. S. 11 mm. Machine Gun, H.E. 'Spot-Light', Experimental Cartridge



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jacket is uncoated steel. Most rounds found today will probably show signs of rust. There should be a black primer annulus, but this could be worn away.

Shortly before World War II, the Germans adopted an explosive incendiary cartridge known as the *B-Pomone*, or observation cartridge (Fig. 8). On German ammunition charts and lists, it was always included with training cartridges and not with Service cartridges. The bullet jacket is gilding-metal-clad steel. Inside the nose was a compartment filled with white phosphorus. This was followed by a lead sheath which contained a detonator backed by a firing pin. There is a lead plug in the base of the bullet. There is no weep hole leading to the phosphorus as in a regular incendiary bullet.

Rounds of early manufacture had a chrome-tipped bullet for identification, then a silver-tipped bullet. The last, and most often seen, had the lower portion of the bullet stained black leaving the tip unmarked. Additional marks may be encountered, such as a thin green band near the point which indicates a high-velocity round; or a lacquered band at case mouth (very hard to see) which indicates tropical loading; or both. This bullet was loaded into brass and steel cases. The primer annulus was black.

There was another training cartridge employed by the Germans that contained an explosive element. This was known as "S.m.K. L'spur Ub.m.Z.", which can be broken down to mean, "Practice Ball with Steel Core and Self-Destroying Tracer" (Fig. 9). The bullet has the usual gilding-metal-clad steel jacket. The jacket contains a lead sheath, carrying a short steel point. Behind this is a container which tapers into a teat that contains an explosive, behind this another container with tracing mixture. This bullet explodes when the teat end of the explosive container, as a result of burning of the tracer, transmits the heat through the thin wall of the teat to the explosive.

This round is identified by about $\frac{3}{4}$ the distance from the point of the bullet to the case mouth being blackened. These bullets also were loaded into brass and steel cases.

Italian explosive cartridge

An explosive cartridge was manufactured in Italy during World War I for Italian 6.5 mm. weapons (Fig. 10). It is not hard to identify due to the unusual shape of the cupronickel jacketed bullet, which also has a small hollow point. Inside is an explosive charge and detonator backed by a firing pin.

Japan had a series of explosive rifle-caliber cartridges, all with the characteristic that the bullet had a flat nose.

The Japanese Navy 7.7 mm. rimmed cartridge (Fig. 11) was for use in Naval aircraft machine guns and ground machine guns. It could also be used in British .303 rifles and machine guns, because it had the same external dimensions as the British .303 cartridge. The bullet of the explosive round had a cupronickel jacket. The front compartment inside the nose contained cyclonite and PETN. To the rear of this is a gilding-metal cup filled with aluminum and cyclonite, or alternatively aluminum and TNT. This is backed by a lead plug. This is the general arrangement of the whole series of Japanese explosive bullets of rifle caliber. The primer annulus is violet.

The Japanese Army 7.7 mm. semi-rimmed explosive round (Fig. 12) has a flat-nosed, gilding-metal-jacketed bullet. There was a black identifying band around the case mouth. It has also been reported that there was an explosive round with the 7.7 mm. rimless cartridge series. This would look like Fig. 12, except for a smaller case head.

There was an explosive round of the Japanese Army 7.92x57 mm. cartridge (Fig. 13). This has a flat-nosed, gilding-metal-jacketed bullet, and there was a white identifying band around the mouth.

Russian explosive cartridge

Imperial Russia had an explosive cartridge for 7.62 mm. rifles and machine guns (Fig. 14). This cupronickel jacketed bullet has a flat nose with broad and shallow hollow point. The copper detonator container is visible. There is a firing pin and explosive included.

Soviet Russia also had an explosive incendiary cartridge in the same caliber (Fig. 15). The front of the bullet contained thermite powder, followed by a lead sheath containing a detonator backed by a firing pin. A lead plug is in the base. The gilding-metal-clad, steel-jacketed bullet was pointed just like the ball bullet. This cartridge was identified by a red or red-and-green bullet tip. Cartridge cases were either brass or copper-coated steel.

The rifle-caliber explosive round was also attempted by the United States.

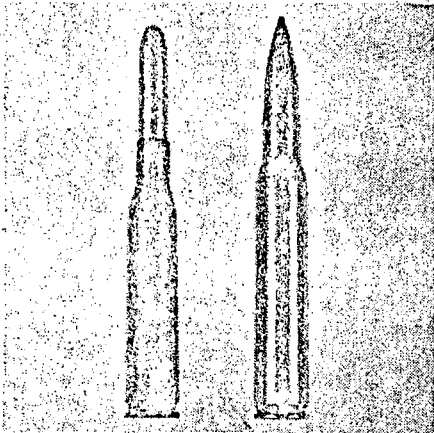
A .30 Gov't M1906, H. E. 'Pomeroy' cartridge (Fig. 16) was made by Winchester for the Government. The bullet had a pointed copper tube inserted in the front end, which contained an explosive. This can be identified by the shape of the point and its green tip.

The last 2 cartridges are the U. S. .30 Gov't M1906 H. E. Spot-Light round (Fig. 17), and the 11 mm. Machine Gun H. E. Spot-Light round (Fig. 18). These are quite easy to identify by the unusual appearance of the bullet. Both were experimental.

6.5X58 "P" CARTRIDGE

Please identify a rimless bottleneck rifle cartridge marked "DWM 457" and "K" ("K" on either side of head). This cartridge is about cal. .25, has a long tapered case shoulder, and a long round-nose bullet. To what rifle is it adapted?—S.C.

Answer: The cartridge is a commercial version of the 6.5 mm. Portuguese cartridge made in Germany by DWM. It is commonly called 6.5x58 Mauser or 6.5x58 "P" (case length is 58 mm.). "K" is for Karlsruhe, where the DWM ammunition plant is located, and "457" is the DWM identification number for this cartridge.



6.5x58 "P" (L.) and .30-'06 cartridges

This cartridge is adapted to the 6.5 mm. Portuguese Mauser-Vergueiro Model 1904 military rifle and to 6.5x58 Oberndorf Mauser sporting rifles. Its long round-nose bullet weighs 155 grs., and the muzzle velocity with 25.6" barrel is 2568 f.p.s. (feet per second).—L.O.

SILENCERS

How do rifle silencers work, and how effective are they? Why are they not generally used?—D.E.V.

Answer: One of the very first successful firearm silencers was developed by Hiram Percy Maxim, a member of the famous American family of inventors.

Silencers operate by trapping the powder gases at the muzzle and releasing them over a little time. While this time is very short, it is enough to lower and lengthen the pressure peak of the escaping gases, thus largely doing away with the resultant sharp report. Maxim originally believed that for effectiveness the gases had to be given a whirling motion through passages around the inside of the silencer, and his first successful silencer was designed on this basis. Experience showed that this was not necessary, the requirement for effectiveness being only that the gas escape slowly. The principle is exactly the same as that of the internal combustion engine muffler. Of course, there must be a hole through the device in the projectile's path.

Trapping the muzzle gases and releasing them over a little time results in slowing them. The force required to do this necessarily involves an equal and opposite forward reaction force on the firearm, decreasing the recoil. A silencer thus acts also as a muzzle brake.

A good silencer can be remarkably ef-

fective in muffling the escaping gases. It may even eliminate nearly all noticeable sound from a small powder charge, leaving only the sound of the gun hammer or striker and of the bullet impact on the target to be heard. The silencer has, however, some major limitations.

One of the greatest is that while noise from the powder gases leaving the muzzle can be muffled, nothing can be done to silence the loud crack made by projectiles passing through the air at speeds higher than that of sound. Even at transonic speeds the projectile makes a considerable noise. The effectiveness of silencers is therefore limited to guns firing projectiles well below the speed of sound.

Silencers are less than effective on revolvers because they do nothing to muffle the gas escaping at the cylinder joint. They are also ineffective on those self-loading arms which open while there is still some pressure in the barrel, since both gas from the opening breech and also the moving mechanism make a noise.

There are also the disadvantages of a device attached to the gun muzzle, where weight and bulk are most inconvenient.

Some United States patents which have been issued on silencers are Nos. 880,386; 1,018,720; 1,207,264; 1,259,251; 1,482,805.

The silencer was given a military application during World War I, when a sniper model of the M1903 Springfield rifle was made with a Maxim silencer and a Warner & Swasey telescope sight. The rifle was very awkward, partly because of the silencer and partly because of the telescope sight design, and there was of course the inability to silence the bullet crack which has been explained above.

Silencers were employed during World War II on some small weapons used by various nations for semi-military purposes. These were classified, and no detailed information is available on them.

Silencers for sporting guns were produced by the former Maxim Silencer Co. over a period of many years. There appears to have been a rather steady demand, but never a very great one. That company discontinued the manufacture of silencers about 1925 as being unprofitable. Manufacture was then taken up by 2 or 3 small manufacturers, but without much success.

Now the only known source of gun silencers is Parker-Hale Ltd., Whittall Street, Birmingham 4, England. Parker-Hale calls these devices sound moderators, and manufactures them for cal. .22 weapons only.

The most important limiting factor is now the regulation of silencers by law. The National Firearms Act includes silencers among the weapons and devices which must be registered with the Alcohol and Tobacco Tax Division of the Internal Revenue Service, with payment of a tax of \$200. Payment of \$200 tax must be repeated at each transfer of the item. Also a tax of \$200 must be paid by the maker (other than established firearms manufacturers, who are licensed separately) on each such item made. Also there are restrictive state laws on silencers.

Because of the severe regulation of these devices, THE AMERICAN RIFLEMAN has not developed information or data on making firearms silencers.—E.H.H.

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