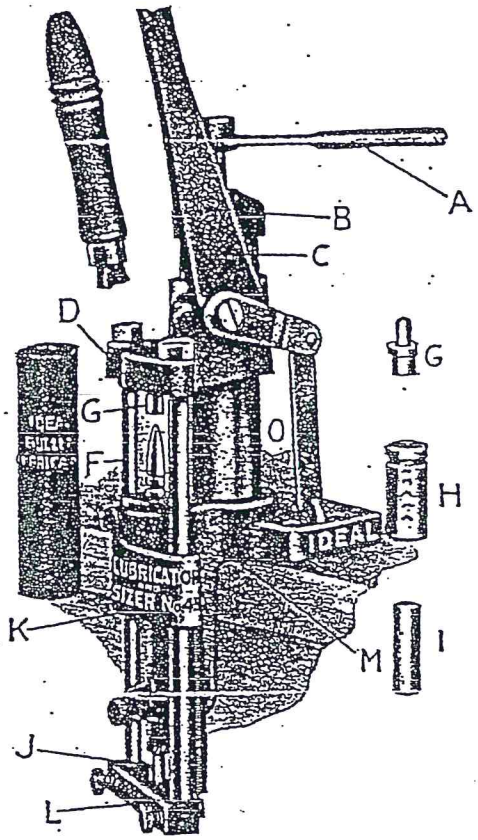
No. 45 *IDEAL*
BULLET LUBRICATOR and SIZER



The new No. 45 Lubricator and Sizer employs the same type of sizing dies used in the No. 1 Lubricator and Sizer, enabling the owners of the older sets of dies to use them in the No. 45 Tool.

Increased leverage makes possible easier operation on large bullets while large guide rods preserve the alignment of the dies.

This new tool is fitted with a steel grease tube which is used as an additional guide to help preserve alignment.

A ratchet-type handle permits accurate regulation of the grease pressure and at the same time it is possible to have this handle clear of the operating handle at all times.

The lubricator is now designed to be held to the bench by four screws furnished with each tool, but can be held in place by C clamps if desired.

This machine will lubricate and size at the same time.

It does the work *easily* and *cleanly* without soiling the hands.

It requires only *one die* to lubricate *all length* of bullets of the same diameter, whether the grooves are narrow or wide.

It leaves the bullet prefectly *true and clean.*

With one stick of our lubricant it greases 500 of the large and 2,500 of the small bullets.

Instructions for Using

WARNING — Do not operate in cold weather until lubricant has been allowed to reach room temperature of approximately 70 degrees.

To Insert Stick Lubricant:—Turn ratchet wrench "A" to right (clockwise) until pressure nut is free of threaded pressure screw, lift off wrench "A" and top casting "B", pressure nut then can be lifted off of pressure screw. Place stick of lubricant over pressure screw and into tube and replace pressure nut, compress the brass piston ring so that it will enter tube "O" and turn ratchet wrench to left (counter clockwise) while pressing down on pressure nut until threads on pressure screw engage. Continue until pressure nut is within the tube and then replace the top casting "B" and Wrench "A" as in illustration.

To Install Die "H" and "I":—Insert punch "I" in die "H" with concave end of punch up, place die in hole in frame "M" grooved end up, bring down lever handle "C" to force die to seat and then tighten set screw firmly. Next, insert top punch "G" in holder "D".

To Change Dies:—Turn ratchet handle to right (clockwise) to relieve grease pressure, loosen set screw that holds die "H" in frame "M", next raise handle "C" until crosshead "L" raises knockout rod "J" against base of die "H". Continue raising lever handle "C" until die "H" is pushed out of frame. If die sticks, a light tapping with hammer on crosshead "L" will start it.

To Operate:—Raise lever handle "C" to greatest height which will raise cross bar "L" against knockout rod "J" until it rests against the bottom of die "H", next turn ratchet handle "A" to left (counter clockwise) until grease pressure is built up, if frame is entirely empty the lubricant must be forced in to fill space before it will reach the bullet. When space is filled the increased pressure will be felt by the operator, too much pressure will be indicated by grease leaking around die "H".

Place cast bullet in position in center of die "H" on top of bottom punch "I". Lower lever handle "C" and force bullet into die "H" correct amount to fill uppermost grease groove in bullet. This is determined by adjusting threaded sleeve "K" of knockout rod "J", next hold handle firmly down while turning ratchet wrench to left to force grease in bullet grooves, if lever handle is not held down firmly grease will be forced between base of bullet and bottom punch "I". When grease grooves are filled increased pressure will be noted on ratchet handle, be sure and have sleeve "K" adjusted high enough so that grease does not get above top grease groove.

Force up the bullet to ascertain how much of it is being lubricated; if two or more of the top grooves do not receive the grease, let down the threaded sleeve "K", then force the bullet down again and press in more grease, after which raise the bullet again to view and if top groove still remains unfilled repeat the operation until all grooves are properly filled, without permitting grease to pass the point of bullet, then fasten sleeve "K" with set-screw and proceed.

Apply no more pressure on grease than is required to just fill the grooves. The very least pressure that will fill the grooves is best. Sometimes there may be portions of the grooves that do not fill readily owing to imprisoned air. If such bullets are again pressed in and out of the die without applying any more grease pressure, they will be filled properly. Many prefer to work with the very lightest grease pressure and raise and lower the bullet twice, the second time without any extra pressure. It requires but an instant of time and insures perfect work. A little practice will soon enable you to gauge the pressure on the lubricant to the best advantage.

Attaching Gas Checks:—No special items are required, gas checks should be started by hand and rapped on bench top to seat bullet, then sized and lubricated in conventional manner. Firm pressure at bottom of stroke when bottom punch meets stop, will finish seating firmly and evenly. *Note:*—Only Lyman Ideal Gas Checks should be used on our bullets, as the two are designed to correctly fit each other and gas check metal is of correct thickness for Ideal Sizing Dies.

Excessive sizing will cause bullets to be sized more on one side than the other and can completely obliterate the grease grooves, the best results are obtained when sizing is limited to .001 to .002 thousandths. Too hard or too soft bullet alloy, oversize bullets, poor casting and oversize gas checks are all points to be checked if bullet sizing does not give desired results.

Care:—Oil moving parts of press and keep lever handle screw tight at all times to avoid screw breakage.

IDEAL HANDBOOK gives additional information of value to the reloader.

THE LYMAN GUN SIGHT CORPORATION

MIDDLEFIELD, CONN.

SUCCESSORS TO

IDEAL MANUFACTURING CO.

FORM 45L-S-5M-10-36HULL

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