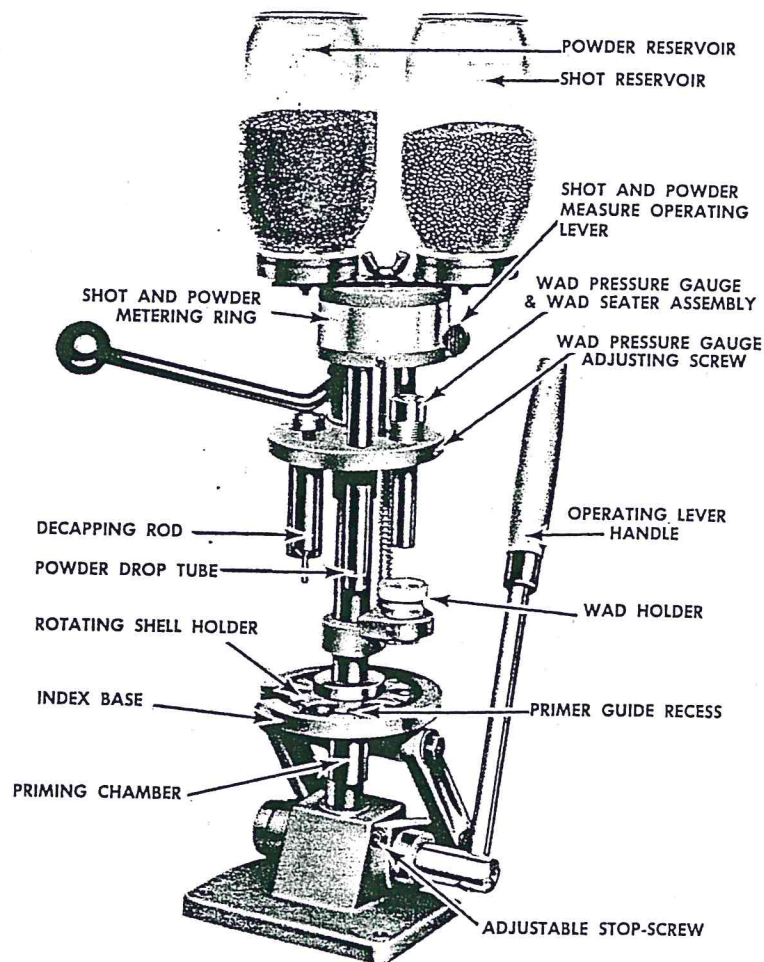


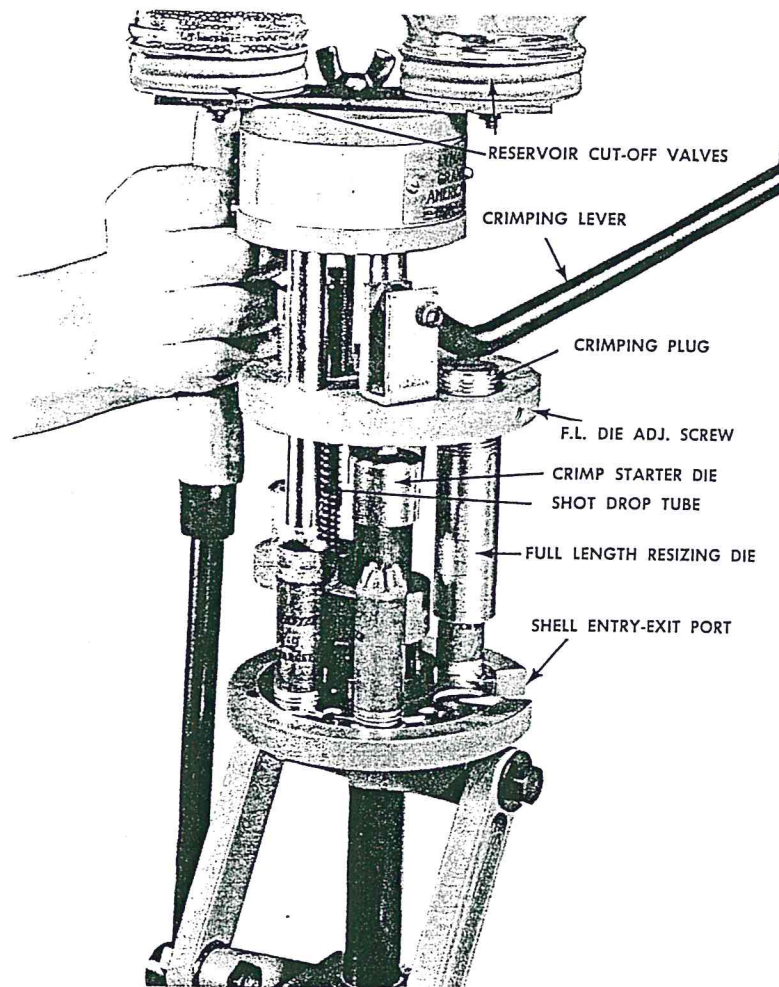
OPERATING INSTRUCTIONS

# Lyman

# GRAND AMERICAN

PROGRESSIVE SHOTSHELL  
RELOADING PRESS





### WHOA FRIEND!!!

Hold Everything! By now you've got your new Grand American out of the box, and we know your 'raring to get it agoing, but wait a bit. Read and heed this "brief message from the sponsor," which will make your shotshell reloading faster, easier and more enjoyable.

1. Place the press on a sturdy table or bench. Ideally, your working surface should be about waist

high from the floor. Position the press with the front edge of the base about four inches from the work bench facing you. Using the three holes in the press base as a guide, drill  $\frac{3}{8}$  inch holes through the bench and bolt press in place with the bolts provided.

2. Examine the illustrations with parts indicated. These show both front and rear views of the press together with the names and locations of all important



parts. Thoroughly familiarize yourself with these names and locations as they will be referred to many times in the operating instructions.

3. The Grand American press was designed so that with speedy, simple adjustments any brand of fired  $2\frac{3}{4}$  inch cases with folded crimp can be reloaded. Your press was factory adjusted to process Winchester - Western, Remington and Peters skeet and trap load cases having the high inner base wad. Primers required are the battery cup type, either Winchester or Remington style, depending on cases to be used. Shot and powder measures are set-up for 23 grains of Red Dot with  $1\frac{1}{8}$  oz. of shot. Wad pressure gauge is preset for 80 lbs.

4. Die part adjustment.

1. Decapping rod—Fixed position, need not be changed.
2. Powder Drop tube — This part engages the inner base wad during the priming operation and therefore must be adjusted up or down depending on type of case used. To adjust, simply loosen the drop tube lock bolt, grasp knurled part of tube and turn on threads. (Example, if primers appear to be seated too deep, adjust drop tube slightly upward. If primers are not being fully seated, adjust slightly downward.)

3. Priming Chamber assembly —Located at station 2 beneath powder drop tube. This part normally will not require adjusting unless you wish to use some of the short Alcan brand primers. To move the plunger in the assembly, simply loosen plunger screw with the proper Allen wrench provided and adjust up or down to desired position.

4. Wad Pressure Gauge and Rammer-Pressure indicator is

visible only when wads are being seated. To adjust, decap, prime and charge a case with powder and place under gauge. Place desired wads in wad holder, pull operating lever to stop and examine indicator. Indicator has a series of graduations which, when read from top down, indicate the following, FIRST LINE 40 lbs. SECOND LINE 60 lbs. THIRD LINE 80 lbs. FOURTH LINE 100 lbs. To obtain desired setting, loosen set screw at edge of turret, grasp knurled part of indicator and turn threads up to decrease and down to increase pressure. Keep in mind that it is not necessary to obtain an exact to the pound reading. Adjust gauge to give a reading slightly higher than that which is specified for the load in question. (Example, if the loading data calls for 50 lbs. pressure, set gauge to expose the first line plus about  $\frac{3}{4}$ 's of the space between that and the second line.)

5. Shot Drop tube—No adjustment necessary.

6. Crimp Starter Die—This can be moved up or down by loosening and twisting lock bolt.

7. Full Length sizing die and crimping assembly—This should be set so that end of die just touches shell holder when index base is in down position. To adjust simply loosen set screw and twist up or down.

5. The Powder and Shot measure assembly is a completely new design which incorporates the use of precision bushings of fixed volume mounted in a rotating control ring. The inherent accuracy of this design permits the use of a wide selection of powders and shot charge weights. Both shot and powder reservoirs are made of heavy

mason jar glass which will not discolor or permit powder to adhere to sides. Jar tops have standard thread to facilitate easy replacement if needed. Each reservoir has its own cut-off valve, making it easy to start and end loading cycles, and to refill jars. Reservoirs hold about 1½ lbs. of powder and 15 lbs. of shot. To refill while loading or to shut down operations, follow this procedure: 1. As you finish a shell, pull measure operating lever to forward position. 2. Cut-off reservoirs by turning cut-off valves clockwise to the stops. 3. Remove wingnut and lift reservoirs off press. 4. Refill and screw into place, remember that the powder reservoir is always to the left when placing assembly on press. 5. Be sure cut-off valves are closed before placing on press. 6. When reservoir assembly is fastened in place, open cut-off valves by turning counterclockwise to stop, commence loading routine keeping in mind that the measure operating lever is already in the forward position. 7. If you are completing your loading for the day and want to clear press completely, just remember to place an empty shell case under each drop tube and operate measure lever a few times to clear out any powder or shot remaining in measuring ring.

6. Now you are ready to start loading. Fill the reservoirs, screw them in place and be sure the cut-off valves are closed. Put them in place on the press with the wing-nut locking them in place. Lay out your empty cases, primers and wads where they are easy to pick up. Follow the operating instructions carefully and very soon you will be turning out hundreds of top quality, hard hitting shotgun shells. One last bit of advice before you start, visit your local reloading

equipment dealer and pick up a copy of the new Lyman Reloading Handbook #42. It's chock-full of the latest authoritative info on all types of handloading with special emphasis placed on shotshell data, components and helpful hints to make you a more proficient handloader.

1. As in Figure- 1, grasp first empty casing and insert into Entry-exit port slotted into Index Base. Lift it upward gently until it engages in rotating shell-holder, then with light pressure, advance rotating table one click-stop to the right. The shell should now be positioned directly below Decapping Rod. Place shell correctly this time, and every other step will *automatically* align itself. With one firm stroke of the Operating Handle, raise Index Base to its limit against Decapping tool. Old Primer pops out.
2. Now, insert a new primer into recess in rotating shell holder to the right of shell you just decapped. (Figure 2). Take another empty shell casing, proceed as

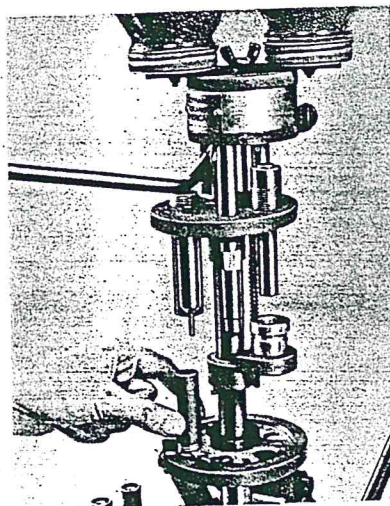


Fig. 1



with first. Insert into rotating shell holder through Entry-exit port in Index Base, turn rotating shell holder one stop. Primer will position itself in Index Base opening under Priming Die (Figure 3) and you're ready to Decap, Prime and Load Powder with the next stroke of the Operating Handle. Activate Powder Hopper by rotating it COUNTER-CLOCKWISE to stop. From now on, you will be loading powder with each operating stroke.

3. This time, as you grasp Operating Handle, extend forefinger as in Figure 4. Extended forefinger will engage Powder Measure Lever as you stroke with Operating Handle, preparatory to throwing powder charge into shell. Grasp Operating Handle and perform this step. At forward-stop position of Operating Handle, retract forefinger, and extend thumb. (Figure 5). It will return the Powder-measure lever to normal position charging case with Powder as Operating Handle is retracted. With this second stroke of the Operating Handle, you have Primed and Loaded empty shell case No. 1, and have Decapped empty shell case No. 2.
4. Enter empty shell case No. 3 into rotating shell holder exactly as in steps 1 and 2. Advance one click-stop, insert Primer into Primer Opening in rotating shell holder. NOW . . . set wads into Wad Holder beneath Position 3 of Press. (Figure 6) Extend forefinger to engage Powder-measure lever as in Figure 4, and thrust Operating Lever downward steadily but firmly, raising Index Base to Positive Stop position each time! With this stroke, you seated wads AT PRECISE PRE-SELECTED - PRESSURE in shell 1, Primed and Loaded shell 2, and Decapped shell 1 ALL WITH SAME DOWNWARD

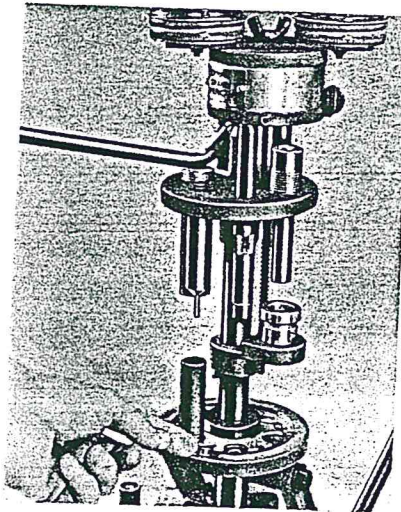


Fig. 2

STROKE OF OPERATING HANDLE. You can see how a rhythm-type of standard oper-

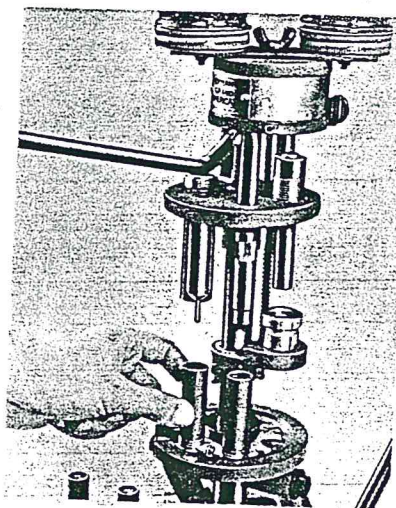


Fig. 3

ating procedure can be initiated as you become familiar with the "Grand American." Here it is . . . Start shell, advance one click-stop. Insert Primer, Insert Wad . . . STROKE.



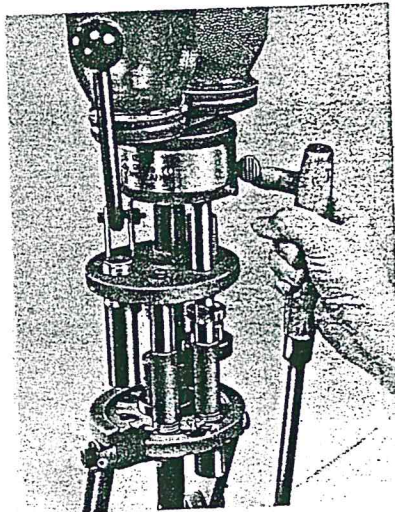


Fig. 4

5. Activate Shot Hopper by rotating counter-clockwise as far as it will turn. Insert empty shell number 4, advance one click-stop. Set Primer and Wad, Grasp Operating Lever. Extend forefinger. NOW . . . Stroke downward, and throw powder into shell 3 while it is Priming. You are Decapping shell 4, Priming and Loading shell

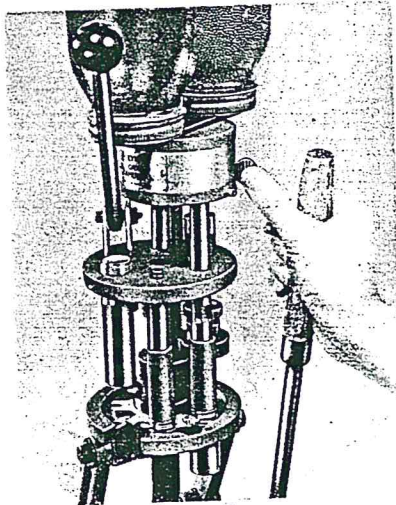


Fig. 5

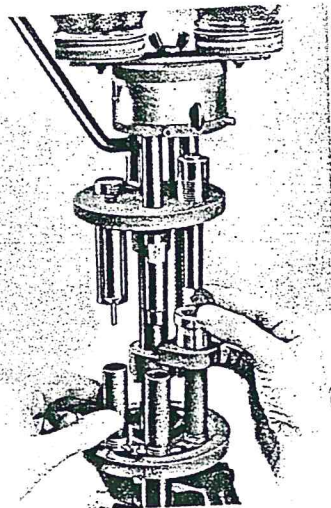


Fig. 6

- 3, Wadding under pressure on shell 2, and . . . as you return-stroke, you will throw Shot Load into shell with extended thumb. ALL STEPS POSITIVELY ALIGNED BY CLICKSTOP, ALL STEPS SIMULTANEOUS!
6. Enter empty shell 5 into Entry-exit Port, set in rotating shell

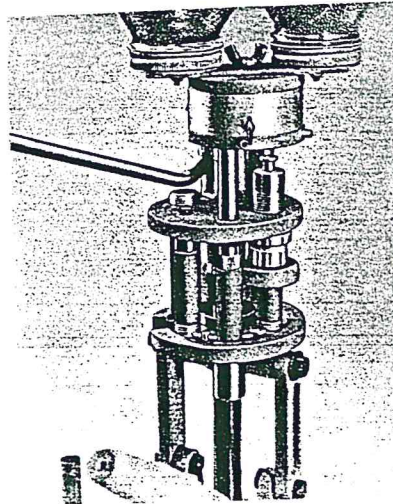


Fig. 7



holder, rotate to right one click-stop. Now, operating rhythm takes over. Slide new Primer into Primer Receiver in rotating shell-holder, set wads in Wad Holder, Grasp Operating Lever Handle. Extend forefinger, Stroke. You will Decap shell 5, Prime and charge shell 4, Wad-seat under pressure on shell 3. As Operating Handle retracts, extend thumb to throw shot into shell 2. Start crimp on shell 1. (See Figure 7)

7. Go through whole procedure as before. Set shell 6, rotate one stop, set Primer, set Wads, Grasp Operating Handle, Extend forefinger. STROKE. Extend thumb on retract. This time, you finish-crimped shell 1. In order to complete the Crimping Operation WHILE INDEX BASE IS STILL IN POSITIVE-STOPPED RAISED POSITION, grasp Crimper Handle with left hand, and depress to line marked on crimping plug, showing above top of turret sleeve. (Figure 8). This takes only even, easy pressure downward or until you feel firm resistance as you pull on the lever, *now* maintain this pressure with your left hand as you push the operating handle rearward, throw shot and powder and lower index base. Maintaining pressure (with crimping lever) as index base is lowered aids the withdrawal of completed shell from sizing die. Using this procedure you will be pushing the completed shell from the top while the shell holder pulls from the bottom. This combination of push and pull virtually eliminates the possibility of pulling the shell apart.

NOTE: The first time or two you operate the tool proceed as above, but *before* you throw the shot and powder, lower the index base, (be sure to follow the push and pull procedure) and look at the completed shell to be sure you have a well formed

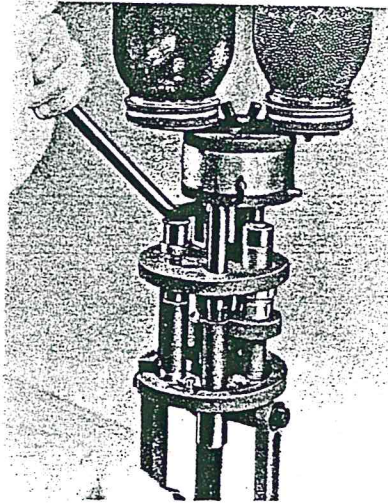


Fig. 8

crimp with the crimp edge beveled. Here's what to check for:

1. Crimp too deep—Ease up on crimping force.
  2. No beveled edge — Loosen sizing die set screw and adjust die lower, check and re-adjust 'till satisfactory bevel is made.
  3. Crimp too shallow—Increase crimping lever force. If this doesn't help, recheck to be sure you are using the proper wad column for the load you want. This information can be found in the current Lyman Reloader's Handbook, Shotshell Section, (available at your dealers for only \$2.00.)
- This step turns out a custom load. Full length sizing is performed while crimp is completed.
8. Same rhythm. Only, this time, as you enter shell 7 and advance to clickstopped Position 1, shell #1 drops down through Entry-exit Port to be taken by hand, or accepted into a container placed

there for the purpose. Proceeding as above, you CANNOT go wrong. Watch Powder and Shot supplies. If either hopper runs out, refill at once. If you should miss, no harm done. The tip-off would be a shell that did not crimp properly. Simply go back and correct supply error. Your All-American is the perfect progressive press for high production loading. One press has reloaded over 50,000 shotshells WITHOUT a failure, and without the slightest apparent wear. All bearing surfaces are oil-

impregnated case-iron against steel. All Lands, Ways and Tools are precision ground, free from burrs and imperfections. Dies and tools in Turret Head guaranteed a lifetime. Operating Lever works on rugged reciprocating arm action that multiplies pressures to make operation easy. Not fatiguing, women and youngsters will be able to operate it as easily as you can. A good level of output is about 350 shotshells per hour, though more could be turned out after the rhythm speeds with practice.

### GRAND AMERICAN POWDER BUSHINGS

Bushing Number	Wt. & Brand of Powder Charge	Bushing Number	Wt. & Brand of Powder Charge
#1	21 gr. Unique	#9	32 gr. Herco
#2	23 gr. Unique		37 gr. AL-7
	35.5 gr. Win. 500 MS	#10	33 gr. Herco
#3	25 gr. Unique	#11	34 gr. Herco or 26.6 gr. PB-2
#4	30 gr. AL-5	#12	36 gr. Herco
#5	32 gr. AL-5	#13	24.5 gr. Win. 450FS
#6	21 gr. Red Dot	#14	25.5 gr. Win. 450FS
#7	34 gr. AL-5	#15	37.0 gr. Win. 500MS
	22 gr. Red Dot	#16	39.0 gr. Win. 540MS
#8	36 gr. AL-5	#17	40.5 gr. Win. 540MS
	36 gr. AL-7	#18	41.5 gr. Win. 540MS
	23 gr. Red Dot		

# LYMAM GUN SIGHT CORPORATION

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