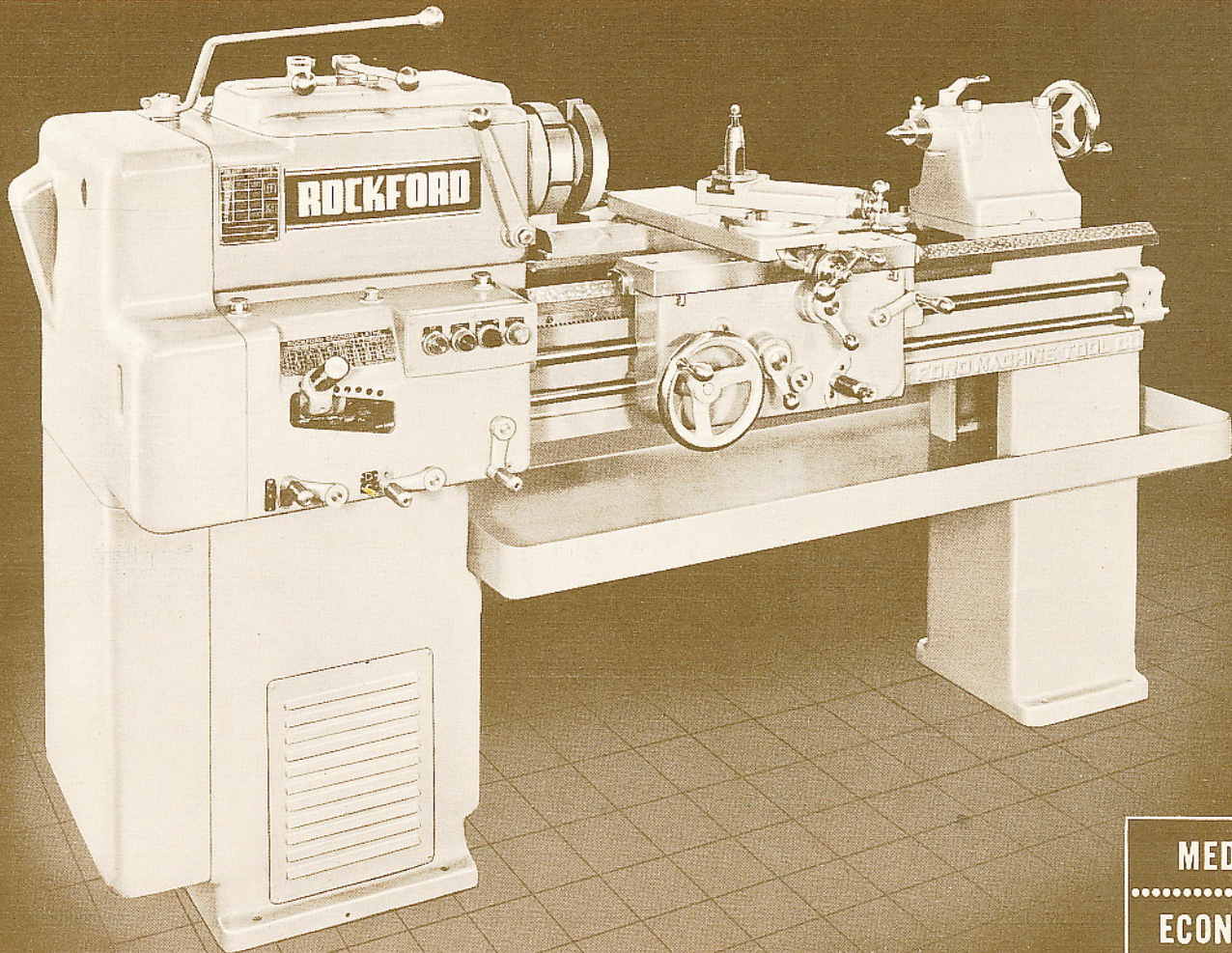


THE

ROCKFORD

16"-18"
ECONOMY
LATHE



MEDIUM-SIZED

ECONOMY-PRICED

- ★ SEPARATE LEAD SCREW AND FEED SHAFT
- ★ ALL GEAR SHAFTS, TIMKEN-MOUNTED
- ★ ALL-GEARED HEAD
- ★ SPEEDS FOR CARBIDE MACHINING
- ★ QUAD-V-BELT MOTOR DRIVE
- ★ 5 HORSE POWER DRIVE MOTOR

The Rockford Economy Geared Head Lathe is designed to fill a specific demand for a medium priced lathe of sufficiently heavy construction to stand up under general production and maintenance use, while providing the accuracy needed for the tool room. Its dimensions are ample. High quality materials are used liberally and judiciously in its construction. This lathe is built by expert machine tool mechanics on an economical quantity production basis.

The Rockford Economy Lathe has a big, accurate lead screw, uninterrupted by keyways, an independent feed shaft with interlocking safety clutch, a handy thread cutting dial as standard equipment, double wall apron, drop-lever feed engagement and every essential of a first-class lathe. The geared head has 12 quick change spindle speeds; headstock shafts and spindle run in Timken precision bearings.

Read our guarantee and check the specifications. Buy Rockford Economy Lathes for real economy in turning operations.

ROCKFORD MACHINE TOOL CO.

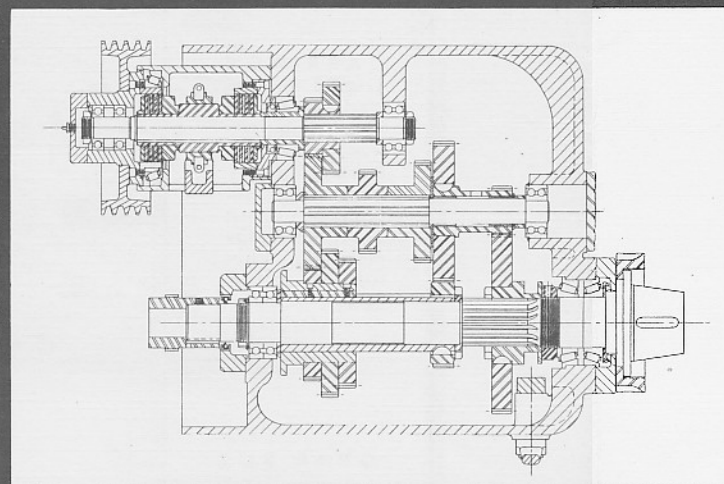
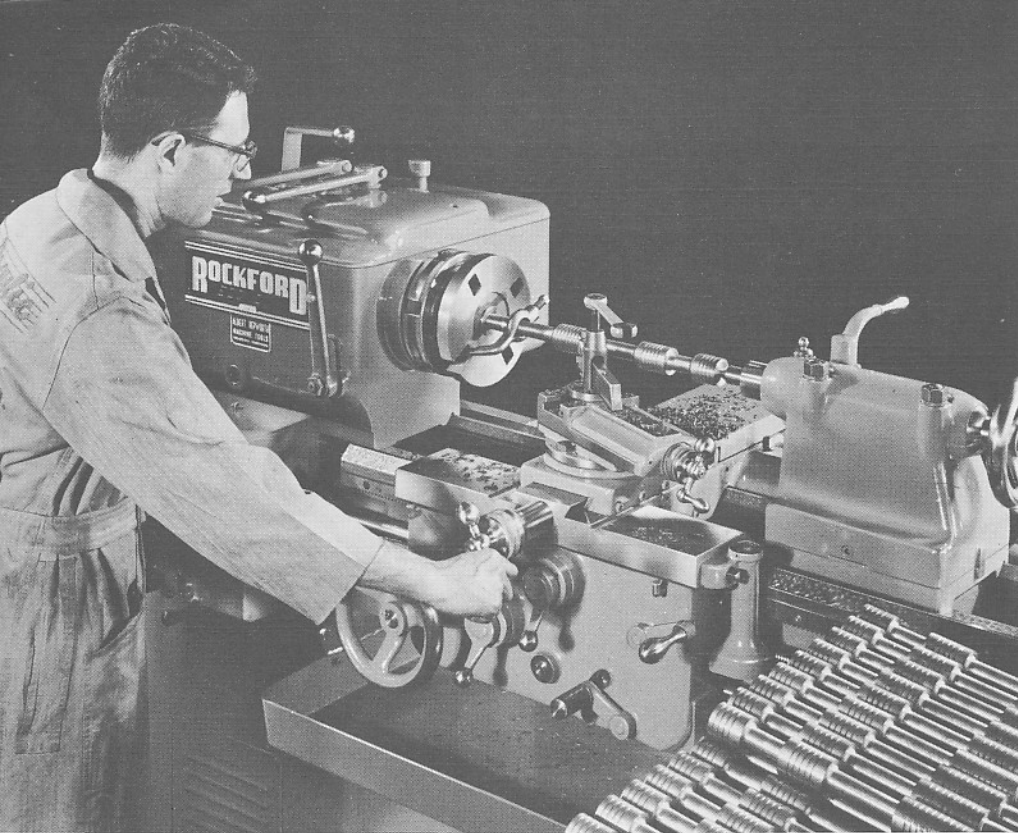
ROCKFORD
ILLINOIS

ROCKFORD Economy LATHE

...built throughout to be preferred

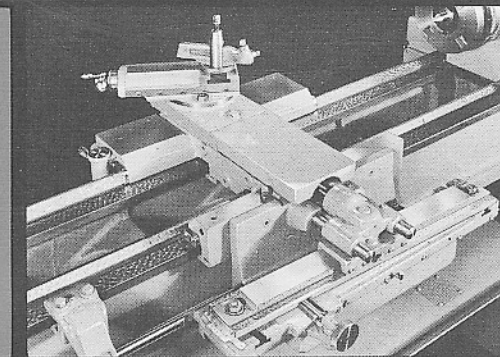
- modern design
- quality construction
- accuracy
- ease of operation

When you check the Rockford Economy Lathe you'll see how highly qualified Rockford design engineers have combined quality materials, modern machine tool design, and precision workmanship to provide a better lathe in the medium price range for general production, maintenance, and tool room work. Compare the Rockford Economy Lathe point-for-point with any other lathe of its type, and you'll see how the Rockford is bound to be preferred.

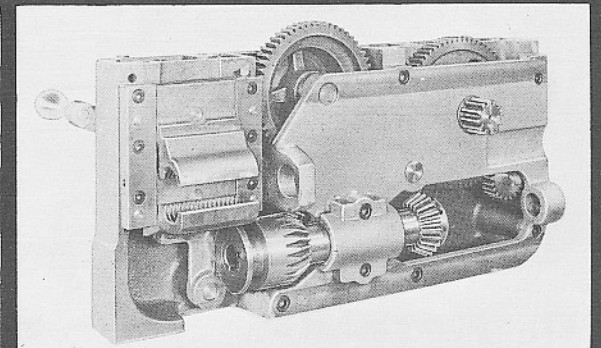
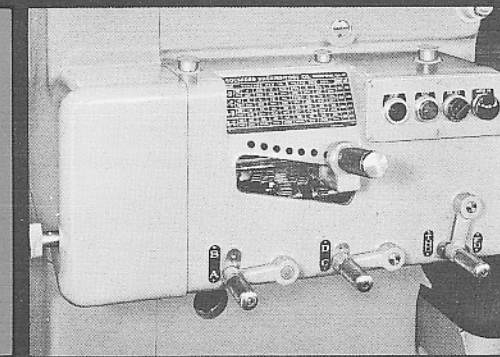


HEADSTOCK — twelve spindle speeds. All sliding gears on the initial drive shaft, intermediate shaft, and the spindle back gear, operate on multiple splines for ease of shifting, balance and maximum driving power. The double row Timken precision bearings on the spindle take all thrust close to the spindle nose providing greater accuracy and longer life. Rear spindle bearing is pre-loaded Duplex type assuring maximum accuracy regardless of thermal expansion of the spindle.

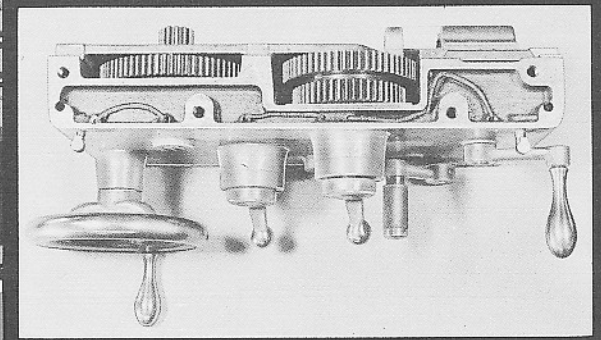
CARRIAGE (right) — provided with 19 $\frac{3}{4}$ " long vee way and flat way bearing on bed. Cross slide and compound rest design permits maximum cuts without deflection.



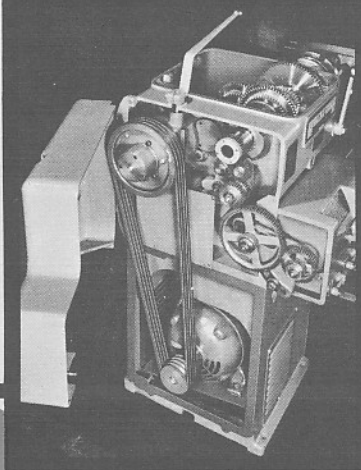
GEAR BOX (right) — full thread range from 4 to 56 per inch — carriage feeds from 0.004" to 0.060".



APRON (above and below)—double wall construction gives front and rear bearing support for all gear shafts.



ACCESSIBILITY . . . All pick-off change gears, reverse gears, etc. as well as the main drive sheaves and vee belts are readily available for inspection by the opening of a one piece hinged metal guard at the Headstock end of the lathe. All moving parts, with the exception of the spindle nose, are well guarded to prevent injury to the operator.



HEADSTOCK . . . Provides a range of twelve spindle speeds, with any speed quickly selected by means of three conveniently located gear shift levers. Gear shafts are metallurgically and mechanically designed with ample margin of load safety; all shafts are anti-friction bearing mounted. The Spindle is made from a high alloy steel forging, has a 1-9/16" hole, and is mounted on Timken zero-precision bearings. The Spindle nose has a No. 1 tapered key drive.

All headstock gears are cut from individual pre-heat treated steel forgings, that are annealed to the hardest machineable state and are hobbed and shaved to provide smooth quiet operation.

Power is transmitted through a double multiple Disc-type clutch which also provides the brake for stopping the spindle smoothly at all speeds and preventing any coasting. All gears and bearings are amply lubricated by an immersion and oil-splash system which is fool-proof. The headstock casting itself is of heavy construction and all mountings for shafts and the spindle are precision bored. The headstock has a bearing on the bed 20" long by 12" wide, and is firmly anchored in place.

TAILSTOCK . . . The tailstock is a heavily constructed member with a quick-acting spindle 2" in diameter and with a travel of 5 $\frac{1}{2}$ ". Quick-acting clamps are provided for locking the spindle and for locking the entire assembly to the lathe bed. The tailstock has a bearing on the bed approximately 10" wide by 10" long. Means are provided for offsetting the tailstock from the center-line of the bed. The spindle is equipped with anti-friction, thrust bearings for ease of operation.

QUICK CHANGE GEAR BOX . . . The quick change gear box is designed to provide a full range of commonly used threads from 4 to 56 per inch and provides carriage feeds from .004" to .060" per revolution of spindle. 32 changes of threads and feeds are available through the Quick Change Gear Box and additional threads and feeds may be obtained through the use of pick-off gears. All gears in the Quick Change Gear Box are cut from high-grade steel or bronze. All shafts are carried on precision needle bearings. A conveniently located lever is incorporated for selecting lead screw or feed shaft operation. The main casting of the Quick Change Gear Box incorporates a built-in Push Button Station, conveniently

located for starting, stopping or reversing the Main Drive Motor.

CARRIAGE . . . The Carriage is of rigid construction, having a bearing 19 $\frac{3}{4}$ " long on the bed. Hold-down gibs of ample dimensions clamp the carriage firmly to the bed ways. The carriage has one vee and one flat way for maximum accuracy. The cross slide and compound rest are rigid members, designed to take the maximum cuts within the capacity of the lathe, without deflection. All carriages are jig-drilled and are readily adaptable for use with our telescopic screw type taper attachment which is available as extra equipment. A separate lead screw and feed shaft are provided so that the lead screw will not have to perform the function of a feed shaft, thus increasing its accuracy and long life.

BED . . . The lathe is well designed, semi-steel, close grained casting of heavy box section, with heavy arched cross members on close centers throughout the entire length. The ways are of the approved double vee, double flat type, providing a vee and flat way for the carriage and the tailstock. The bed is 12" wide, 9 $\frac{3}{4}$ " deep and weighs 102 pounds per foot of length.

APRON . . . The apron is of double wall construction, providing front and rear bearings for all apron shafts. All of the apron gears are made of high quality semi-steel, steel or bronze, providing the strength required for maximum feeds. An interlocking control is provided so that it is impossible to engage the threading and feeding mechanism at the same time. Cross and longitudinal feeds are engaged by quick acting drop levers of modern design. Means are provided in the apron for reversing the direction of carriage feeds. A centralized oiling system is provided for all shafts and bearings requiring oil.

DRIVE . . . The lathe is driven by a 5 horsepower motor mounted in a well ventilated cabinet leg under the Headstock of the lathe. The motor is mounted on a hinged plate with quick and easy means for adjusting and maintaining belt tension. Power is transmitted from the motor to the main drive pulley through four $\frac{1}{2}$ " vee belts. A three-station Start-Stop-Reverse Push Button Station is built into the front of the Lathe at the operator's position for starting and stopping the motor and reversing direction of rotation. The magnetic reversing controller is mounted in a readily accessible location at the rear of the Headstock of the lathe.

