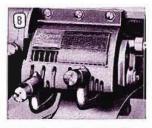
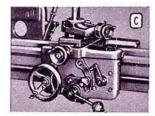


Nationally-Known Logan 9-Inch Metal Lathes

BALL BEARING PRODUCTION MODELS-GUARANTEED ACCURATE TO WITHIN .OOT INCH!



Quick Change Gear Box. Converts plain change gear lathe to instant changing gear operation.
48 threads. Feeds either direction.



Automatic Oil-Type Apron operates from spline in lead screw through worm drive and iriction clutch. Has automatic lock.



. Choice of 17 in. or 28 in. between centers

- · Grease-sealed ball bearing headstock spindle
- Branze bearings at all other points of wear

 Back Geared Screw Cutting Lethes. Fine quality produc-

tion tools especially designed for high-speed operation and sustained accuracy. Widely used by master mechanics, garages, trade schools, etc. Use an iron, steel, wood and plastics—for turning, milling, drilling, grinding, boring, cutting threads, winding coils and springs, etc. Precision-built by Logan Engineering Co. to assure long dependable service at low operation cost.

Capacity: 17 or 28 inches between centers, Swing over bed and saddle wings 91/4 in.; swing over cross elide 5 in. Length of bed 33 or 44 in. Width of bed across ways 61/16 in. Total spindle runout 12 in. from front bearings is less than .001 in. Reversible power longitudinal feed. 48 thread selections 4 to 224 per inch right or left-hand.

HEADSTOCK: Tempered, precision-ground steel spindle rides on grease-scaled pre-loaded bail bearings for smooth, vibration-free and accurate performance. Require no further lubrication, adjustment. Spindle nose diam. 1½ in.—8 right-hand threads per in. No. 2 Morse Taper with Adapter to No. 2 Morse Taper. Hole through spindle 2½; in. Pally enclosed back gears have bronze bearing shaft.

17 In. Between Centers Lathes

Overall dimensions: 33x28x15 in. Length of bed 33 in. Plain Change Gears, Plain Apron Lathe. Ship. wt. 265 lbs. 84 WC 2129F—\$27.00 Down, \$17 Month.....Cash \$270.00 Plain Change Gears, Automatic Apron Lathe. Wt. 275 lbs. 84 WC 2125F—\$35 Down, \$16 Month....or Cash \$348.00 Quick Change Gears, Plain Apron Lathe. Wt. 275 lbs. 84 WC 2126F—\$35.50 Down, \$16.50 Month. Cash \$355.00 Quick Change Gears, Automatic Apron Lathe. Wt. 285 lbs. 84 WC 2127F—\$43.50 Down, \$20 Month.or Cash \$432.50 83 WC 4567 MB—14-HP Capacitor Motor for Above. See Page

Dram Reversing Switch. Reverses spindle direction by reversing motor. Carparaty up to 1 HP, 550-v., AC. With switch box, cord, UL Appr. Ship. wt. 3 lbs. 8 oz. 84 WC 2216 K—Mailed from Factory in Chicago, III.\$11.50

- Total spindle run-out is less than .001 inch
- 12 spindte speeds ranging from 55 to 1450 RPM
- · 1/2-in. callet capacity-1/12-in, spindle hale

TALLSTOCK, CARRIAGE AND CROSS SLIDE. Tailstock spindle travels 2½ in., grad. in ½sths—takes No. 2 Morse Taper accessories. Tailstock top sets over ½ in. for taper turning. Cross slide graduated in thousandths—travels 5½ in. Cross leed screw mounted on self-lubricating bronze hearings. Compound rest swivel graduated 90° in both directions. Tool past opening for tool botder shank ½x½½in. Use with cutter bits up to ½-inch square.

Drive: Countershaft assembly has self-lubricating bronze bearing, 3-step "V" belt cone pulley. Motor (not included) mounts on countershaft bracket, 30x½-in, "V" belt from motor pulley to countershaft; 44x½-in, "V" belt from countershaft to headstock.

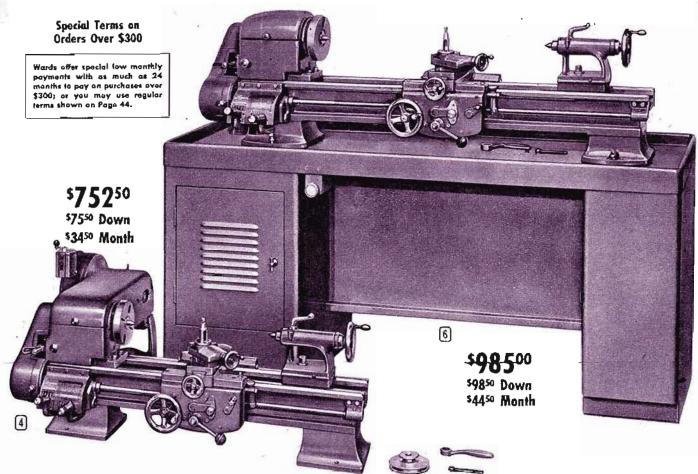
LATHE INCLUDES FOLLOWING ACCESSORIES: 6-in. face plate, No. 3 to No. 2 Morse Taper Adapter, two 60° centers, tool post and wrench, 2-step motor pulley (Slate 1/2 or 1/6-in. bore), tailstock wrench, parts list, instructions.

Recommended for use with 1/2 HP 1725 RPM single shall moter listed below. Accessories (2) (3) below fit this lathe only; other accessories on Pages 30, 31. Shipped promptly from Factory in Chicago, Ill.

28 In. Between Centers Lathes

Overall dimensions: 50x28x151/2 in. Length of bed 44 in. Plain Change Gears, Plain Apron Lathe. Ship. wt. 290 lbs. 84 WC 2241F—\$31.00 Down, \$14.50 Month... Cash \$307.50 Plain Change Gears, Automatic Apron Lathe. Wt. 300 lbs. 84 WC 2242F—\$38.50 Down, \$17.50 Month... Cash \$385.00 Quick Change Gears, Plain Apron Lathe. Ship. wt. 300 lbs. 84 WC 2243F—\$39.50 Down, \$18.00 Month... Cash \$392.50 Quick Change Gears, Automatic Apron Lathe. Wt. 310 lbs. 84 WC 2244F—\$47.00 Down, \$21.50 Month... Cash \$469.50 l2 for description. Ship. wt. 24 lbs. \$2.50 Down. Cash \$469.50 l2 for description. Ship. wt. 24 lbs. \$2.50 Down. Cash

Threading Dial. Indicates point to engage half-nut lever when cutting threads, so tool will enter some groove for each cut. Ship. wt. 1 lb. 8 ot. 24 WC 2215 K—Matled from Factory in Chicago, Ill... \$5.25



Logan II-in. Quick Change Gear Production Lathes

24 AND 36 IN. BETWEEN CENTERS-GUARANTEED ACCURATE TO WITHIN .001 INCH

- · Endorsed by leading shop men in all parts of the world for accuracy, power, rugged strength and efficiency
- Automatic oil type apron, carriage with automatic power cross and longitudinal feeds; 48 thread selections
- · Sealed, pre-loaded ball bearing headstock and spindle mounting, self-oiling bronze bearings elsewhere

For industry, metal and school shops, etc. Spindle mounting requires no adjustment—16 speeds on floor and bench models from 50 to 1430 RPM. Automatic oil-type apron operates from spline in lead screw through worm drive and friction clutch; half-nut drive from lead screw thread for thread cutting. Precision ground "V" and flat way bed. Quick change gears are engaged and disengaged easily.

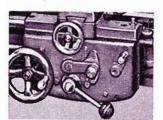
Capacity. Swing over bed 11 in.; over slide, 61% in. Bed 615/16 in. wide. Bull gear and back gears 3/4 in. wide. Gears for 48 thread selections from 4 to 224 per in.-right, left.

HEADSTOCK. Spindle nose diam. 21/4 in.-8 right-hand threads per in. Spindle adapter for reducing spindle nose taper to No. 2 Morse taper. Hole through spindle 1% in. Max. collet cap. 1 in. with No. 84WC2194K collets on Page 30.

TAILSTOCK, CARRIAGE AND COMPOUND REST. Tailstock spindle travels 4 in.; graduated in 16ths, No. 2 Morse taper. 11/16 in. set-over for taper turning. Cross slide travels 61/4 in., compound rest travels 21/4 in., swivels 90° either way-both graduated in 1000ths. Tool post opening 3/4x3/4 in.

COUNTERSHAPT is mounted on sealed ball bearings.

Accessories Include: 6-in. face plate; two 60° centers; threading dial and chart; drum reversing switch; spindle nose adapter to No. 2 Morse taper; tool post holder; 2 wrenches; "V" belts and 2-step motor pulley (state 1/2, % or 34-in. bore); parts list and instructions. Motor not included. Order 34-HP single-phase motor 83WC4581MO on Page 12. See 3-phase motor below. Lathes shipped promptly from Chicago Factory; pay Freight from there.



Automatic Oil-Type Apron



Bench, Floor Models \$75250 to \$86000 Cabinet Models \$98500, \$104000

BENCH MODELS. Precision engineered features described above. Maximum collet capacity 1 in. with No. 84 WC 2194K listed on Page 30. Height 21 in. Without motor, chip pan or legs.

24 In. Between Centers Lathe. 431/6-in. bed. Length 54 in. 84 WC 2222 F-Ship. wt. 505 lbs. \$75.50 Down.....Cash \$782.50

36 In. Between Centers Lathe. 551/8-in. bed. Length 66 in. 84 WC 2220 F-Ship, wt. 550 lbs. \$80.00 Down.....Cash \$797.50



5 FLOOR MODELS. Ht. 481/2 in. With heavy-gauge steel chip pan and cast-iron legs.

24 In. Between Centers Lathe. 431/2-in, bed. Wt. 615 lbs. 84 WC 2223 F..... Cash \$815.00

36 In. Between Centers Lathe. 551/8in, bed. 66 in, long. Wt. 665 lbs. Only \$86 Down on Terms. 84 WC 2221F....or Cash \$860.00

Fully Enclosed Models. Have all precision engineered features listed above plus streamlined steel pedestal base which encloses underneath drive. Trim, compact base with no protruding parts, saves valuable floor space, is only 21 in. wide. Gears, pulleys and belts completely enclosed for operator's safety. Switches and controls are conveniently located at operator's fingertips for instantaneous control. 16 spindle speeds 38 to 1230 RPM. Ball bearing drive assembly, enclosed in left compartment, transmits power to lathe spindle. Lever operated belt tension release for changing belt steps. Height overall, 48¾ in. Motor not included, see above. Credit Terms are on Page 44. Shipping weights: 810 and 870 lbs.

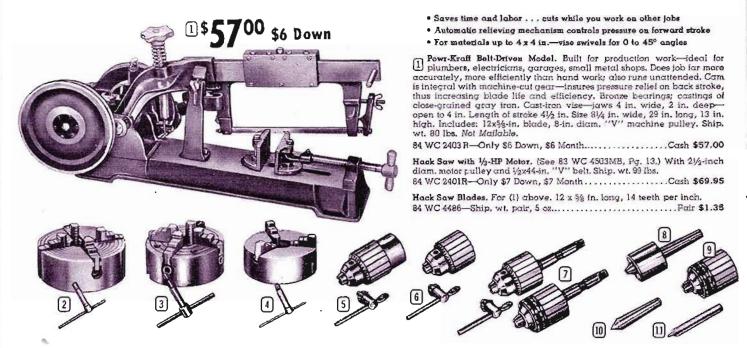
24 In. Between Centers Lathe. 431/8-in. bed. 84WC2224F-59 in. long. \$98.50 Dn. Cash \$985.00

36 In. Between Centers Lathe. 551/8-in. bed. 84WC2225F-701/2 in. long. \$104 Dn. Cash \$1040.00

3-Phase Motor. 3/4-HP Ball Bearing. 1725 RPM. 40° C. continuous duty. 5/2x1 1/8 in. shaft. 83 WCP 4652 K-220/440-V, 60-cycle AC, 3-phase only. Postpaid from Chicago Fact. \$49.50

CHASKOFPO WARDS 29

Fast Cutting Power Hack Saw—90 to 100 Strokes Per Min.



Famous Logan Chucks \$3225 to \$8900

Logan 4-Jaw Independent Chucks. Precision 2 3 Logan 4-Jaw Independent made of finest materials. 6-in. diam. reversible jaws have independent screw adjustments, hold work of any shape from inside or outside. 1-pc. semisteel body, ground outer edge and face. Heattreated alloysteel jaws. Acmethreaded. With wrench. (2) FOR LATHES WITH 21/4-IN. 8-THREAD SPINDLE. 84 WC 2228 KB-Wt. 20 lbs. \$5,50 Dn... Cash \$52.50 (3) FOR LATHES WITH 11/2-IN. 8-THREAD SPINDLE. 84 WC 2143-Wt. 13 lbs. \$3.50 Down. . . Cash \$32.25

Logan 3-Jaw Universal Chucks. 5-in. diam. Self-centering jaws, adjusted by turning 1 screw. Improved design gives less overhang, less vibration, greater cut-off capacity. Inside, cutside jaws.

MEDIUM-DUTY MODEL. Ship. wt. 9 lbs. \$5 Down. 84WC2142-Fits 11/2-in. 8-thread spindle. Cash \$47.00 HEAVY-DUTY MODELS. Ship. wis. 11, 20 lbs. 10% Down. 84WC2207-Fits 11/2-in. 8-thread spindle......\$53.75 84WC2227 KB-Fits 21/4-in, 8-thread spindle..., 89.00

Nationally Known Jacobs Chucks and Accessories \$920 to \$2650

[5] Jacobs Headstock Chucks. Thread directly to any 1½-in, 8-thread spindle. Hollow body allaws chucking of long pieces through spindle. 84 WCP 2148 K-Capacity 1/2 to 3/2 in. Ppd. \$19.00 84 WCP 2149 K-Capacity 3/16 to 3/4 in. Ppd., 22.75

Jacobs Geared Drill Chucks. Strong, precision 6 chucks that fit headstock or talistock of Powr-Krait and Logan metal lathes when used with arbors (11) at right. With chuck key.

84WCP2146T-Capacity 0 to 1/2 in. Postpaid . \$9.20 84WCP2147T-Capacity 3/16 to 3/4 in. Pstpd. . 13.85

Jacobs Commutator Kit. Precision built for extreme accuracy. Designed especially to hold armature shalts rigidly and accurately during reconditioning. Includes 1/4 to 3/4-in, capacity armature driving and center rest chucks which mount in headstock and tailstock with No. 2 Morse Taper arbors (included). Metal case, chuck key. 84 WCP 2151T-Postpaid. \$3 Down, Cash \$26.50

8 60° Anti-Friction Center. For high speed. Live center turns with work for faster, heavier cuts. Mounted on grease-sealed New Departure kail, Timken roller bearings for smoother operation. No. 2 Morse Taper shank.

84 WC 2200 K-Ship. wt. 2 lbs......\$27.50

Jacobs Center Rest Chuck. Accurate support tor centerless work such as armoture shafts. 3 adjustable specially treated bronze jaws in which shaft rotates. Use No. 2 Marse Taper arbor (11 below) to mount in lathe tailstock.

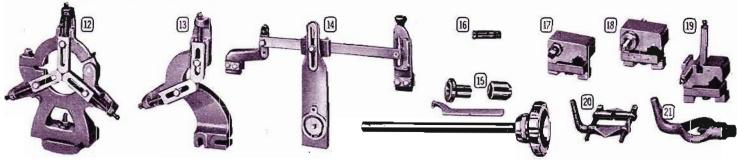
84 WCP 2150 K-1/4 to 3/4-in. capacity. Ppd. \$13.50

60° Center. Precision ground tool steel. No. 10 2 Morse Taper shank.

84 WC 2201K-Ship, wt. 8 oz......\$2.75

Jacobs Chuck Arbors. Postpaid.

1 84 WCP 2152T—Fils 84 WCP 2146T ... \$1.20 84 WCP 2153T-Fits 84 WCP 2147T, 2150K. 1.20



Center Rests. Adjustable 3-in. capacity provs. Cast-iron frame. Wis. 9, 10 lbs. 84 WC 2210 K-Fits 9 in. Logan Lathes. \$10.50 84 WC 2198 K-Fits 11 in. Logan Lathes. 14.95

Follower Rests. Adjustable 3-in. capacity 12 jaws. Cast-fron frame. Wis. ea. 4 lbs. 84WC2211K-Fits 9-in. Logan Lathes. . . . \$6.50 84WC2164T-Fits 11-in, Logan Lathes.... 9.25

Taper Attachments. Taper to 4 inches per [4] foot in either direction. Detachable for straight turning.

FOR 9-IN. LOGAN LATHES. Ship. WL 16 lbs. 84 WC 2230K-----\$63.75 FOR 11-IN. LOGAN LATRES. Ship. wt. 18 lbs. 84 WC 2190 KB.....\$73.50

See Page 44 for Convenient Credit Terms.

Draw-in-Collet Chucks. Includes: clos-Is ing sleeve, spindle cap, wrench.

FITS 9-IN. LOGAN LATHE, Use with 84 WC 2162K (16) below. Ship. wt. 41/2 lbs. 84 WC 2214 K-1/16 to 1/2-in, capacity \$29.25 Firs 11-IN. LOGAN LATRE. Ship. Wt. 7 lbs. 84 WC 2192 K-1/16 to 1-in, capacity . \$48.50

Draw-in Collets. For Logan 9 in. lathes. 16 Use with Collet Chuck 184 WC 2214K chove). 15 sizes: 1/16 to 1/2 in. by 32nds of an inch. State size wanted.

84 WC 2162 K-Ship. wt. 6 oz... Each \$5.00

Draw-in-Collets for 11-in. Logan Lathes. Use with Collet Chuck (15) above. Choice of 31 sizes: 1/16 to 1 in. by 32nds. 84WC2194 K-State size. Wt. 12 oz. Ec. \$5.95

Cal. No's, ending in "K" or "KB" shipped pramptly from Chicago Fact,; Items ending in "T" from Chicago Stocks order, pay postage from usual Ward Mail Order House.

Carriage Stop. Give position stop for lathe carriage. Clamps over front "V" way. Adjustment screw, lock nut. 84 WC 2197 K-For right or left. Ship. wt 2 lbs.......\$6.50

Micrometer Carriage Stop. Accurately locates carriage B position on lathe bed. Ship. wt. 3 lbs.

84 WC 2195 K-Micrometer graduated in .001 in . . . , \$13.75

Double Carriage Stop. Adjustable screw at end of each tinger sets carriage for 2 desired positions. Use on either side of carriage. Clamps to bed. 84 WC 2196 K-Ship. wt. 3 lbs......\$10.95

Clamp-Type Lathe Dog. For square, hex, rectangular, round work. Mounts without removing work. 134 in. 84 WC 2182T-Drop-lorged steel. Ship. wt. 11/4 lbs. . . . \$4.39

Standard Lathe Dogs. Held work firmly-transmit maximum power. Highest quality heavy drop-lorged bar steel; square need set screw. State size. Wt. ea. 10 oz. 84 WC 2183T—1/2 inch......\$1.08 3/4 inch......\$1.28 1 inch........ 1.59 11/2 inch........ 1.77

30 WARDS BA

Fashion Your Own Gems—Right in Your Own Home

- · Complete new kit with all accessories you need for outting, grinding and polishing semi-precious stones
- 12-in. diam. spun aluminum rustproof tub; 7-in. diam. diamond both saw blade for professional-type results

New Gem Making Outlit. It's easy and lascinating to form beautifully polished semi-precious stones for earrings, cuff links, pendants, bracelets, etc. Outfit has all you need to saw, grind, sand, polish and buff stones of all kinds. Collect semiprecious stones (in quarries, beaches, river beds, etc.) or buy uncut stones from lapidary supply house. Instructions included,

Forced lubrication to shalt bearing. Wheels run in horizontal position. Kit includes: assortment of semi-precious stones; 7-in. diamond saw blade; rock clamp; 7-in. cast-iron lap wheel; 6-in. silicon carbide 120 grit grinding wheel; 6-in. convex sanding lap; 6-in. felt polishing lap; 4 oz. each fine and med. silicon carbide grit; 2 oz. polishing compound; 6 dop sticks; dop cement; snap-on lubricant tank; water feed hose and clamp; ½-HP 1750 RPM split-phase motor; ¾x49-in. "V" belt; 2½-in, motor pulley. Shipped promptly from Chicago Stock; order, pay postage from usual Mail Order House. Ship, wt. 37 lbs.

84 WC 2751 YBT-Complete Kit. Only \$6.50 Down.. Cash \$63.95

Kit Less Motor Belt, and Pulley. Ship. wt. 19 lbs.

84 WC 2750 MT-Only \$5 Down, \$5 Per Month.... Cash \$49.60



New! Pottery Maker with Variable Speed Drive

- For shaping circular and cylindrical pottery pieces . . adjustable easy-action foot pedal control
- Simple positive acting variable speed drive provides smooth speed range from 38 to 130 RPM (view (Å))

Extremely simple to operate ideal for ceramic hobbyists Extremely simple to operate—ideal for certains industrial and students. Forms bowls, vases, ash trays, etc. Designed for extra range, long life and all 'round versatility. 9-in. cast aluminum throwing head is reversible—one side etched with concentric circles for ease in centering objects. Reverse specially recessed for molding plaster bats. Built-in water container—no

reaching, no spilling. Removable drain plug for easy cleaning.

Cast aluminum base. Babbitt and bronze bearings. 14-HP motor, V-belt, motor pulley. Order liquid glaze (see Pottery Supply Kit) and clay separately below. Wts. 41 lbs., 24 lbs. 84WC2756 YBT-Pottery Maker with motor. \$7 Dn., Cash \$69.95 34WC2755 MBT-Pottery Maker less motor. \$6 Dn., Cash 57.50

Pottery Supply Kit. Contains 7 assorted colors of liquid glaze in 1-oz, jars; glaze hardener; 21/2-oz, of reducer and 3 oz, jar of undercoat; 3-lb, package of pottery clay. 84 WC 2757T—Ship. wt. 7 lbs......\$6.50

Pottery Clay. No kiln firing is necessary-bake in your kitchen oven to durable hardness at temperatures up to 250°.

84 WC 2758T-121/2-1b. package. Ship. wt. 13 lbs......\$4.25 Note: Pottery Maker and accessories shipped promptly from Chicago Stock; order, pay postage from usual Mail Order House.





Accessories to Add Versatility to Your Metal Lathe

- Threading Tool Holder. Drop-forged steel, Cuts 60° "V" threads. Forged 60° cutter with wrench. Wt. 8 oz. 84 WC 2171T- 3x3/4-in. shank...\$5.22
- Cut-Off Tool Holders. Drop-forged 25 26 heat treated, hardened. 3/8x3/4in. shank. Ship. wt. 9 oz. each. (25)84WC2173T-RIGHT-HD. HOLDER \$3.09 (26)84WC2172T-STRAIGHT HOLDER. 3.09
- Extra Blade. Fits (25) and (26). 27 84 WC 2174T—Ship. wt. 1 oz. \$1.28
- 28 Kaurling Tool Holder. Tempered tool steel. Medium diamond knurt. 84 WC 2175T-Ship. wt. 10 oz....\$6.20
- Diamond Formed Knurls. Wt. pair 2 oz. 84 WC 2176T-Fine Knurt.... Pair \$2.11 84 WC 2177T-Medium Knurl Pair 2.11 84 WC 2178T-COARSE KNURL . Pair 2.11
- 29 to 31 Prop-Forged Steel Cutter Holders. For 1/4-in. sq. cutter bits. 3/3x3/4-in, shank. Average wt. 9 oz. (29) 84 WC 2170T—STRAIGHT....\$2.61 (30) 84 WC 2169T—LEFT-HAND.... 2.61 (31) 84 WC 2168T-RIGHT-HAND... 2.61
- Blank Cutter Bits. High speed steel. For holders above. 1/4x1/4x2 in. 84WC2203T-Wt. 1 lb. . Pkg. of 6 for \$1.45
- Formed Cutter Bit Sets. High speed Formed Cutter by Sets, Inght-left turning, right-left furning, right-left facing and threading bit. 1/42/4 in. Ship. wt. 1 lb.

84WC2204T-HIGH-SPEEDSTEEL.6 for\$2.05 84WC2205T-CARBIDE-TIPPED. . 6 for 8.53

60° Center Drill, Countersink. Carbon tool steel, hardened and ground. Ship. wt. 3 oz. State size. 84 WC 2181T-Vie in. 50e; 3/32 in. 65e

- Boring Bars. High speed steel tip, carbon steel shank. Fit (36). 84 WC 2180T-State size. 1/8x4 in . . 72c 3/16x41/2 in...94c.....1/4x5 in. \$1.21 5/16x6 in...\$1.39.....3/8x7 in. 1.89
- Boring Tool Holder. Reversible yoke. 1/4-in. bar, bit, wrench. 84 WC 2179T—Wt. 1 ib. 4 oz...\$6.20
- Face Plates, Fit 1½-in, 3-thread spindle. Precision machined and balanced. (37) 6-IN. DIAMETER FACE PLATE.

84 WC 2154T-Wt. 3 lbs. 8 oz....\$5.25 (38) 8-IN. DIAMETER FACE PLATE. 84 WC 2155T-Wt. 6 lbs......\$7.75

8-In, Diam. Face Plate. Fits 21/4-in. 39 8-thread spindle. Ship. promptly from Chicago Factory. 84 WC 2199 K-Wt. 6 lbs......\$9.50

Milling Attachment

Famous Palmgren Quality. 10 Converts Powr-Kraft 10-in. and Logan 10 and 11-in. lathes into small milling machine for face milling cutting keyways and slots, milling dovetails, squaring shalts, making dies, etc. Accurate graduations for rotary angle adjustments, graduated verti-cal feed screw. Jaws 27/16 in. wide, 1½ in, deep, open to 2½ in. Wt. 13 lbs. Ship. promptly from Chgo. Fact.

84 WC 2245 K ... Cash \$24.75 Metal lathe access, on this page with "T" ship, from Chlcago Stock; order, pay postage from your Mail Order House.

MARDS 31