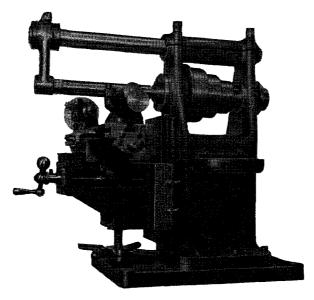
BUILD YOUR OWN MACHINE TOOLS

CASTINGS

We Supply The LATHES – SHAPERS – MILLING MACHINES



No. 2 Bench Milling Machine with Overarm Constructed From One of Our Castings Sets. Not Counting Labor This Milling Machine can be built For Less Than 20 Percent of Cost of Comparative New Machine Tool.

We supply Machine Shop Owners, Machinists, Vocational and Trade Schools, Modelmakers and Hobbyists, with complete sets of unfinished castings, together with quarter and half full size detail and assembly working drawings, for building a number of simply designed and easily constructed machine tools. These machines have been designed with a view to their eventual construction with tools found in the average small machine job shop or school machine shop. No jigs, fixtures or special tools are required in machining the castings.

People who "like to build things" are numbered in the many thousands. An undertaking such as designing and making the patterns, obtaining the castings from a foundry, and completing the machine work, fitting and assembly of a worthwhile project, is mostly beyond the pocketbook and shop facilities of the average man. However, given the castings and the blue prints, the project becomes greatly simplified, and completion of a really good and useful machine is easily accomplished.

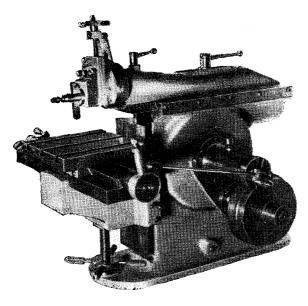
Our castings are carefully inspected at the foundry before acceptance and again before shipment. Hidden flaws are seldom uncovered but should one develop during machining such casting may be returned to us prepaid for replacement at no further costs. We assume no liability for time or expense incurred in machining a defective casting.

Due to changing costs of foundry products and labor we issue a separate price list of castings sets. One such price list accompanies this catalogue or will be forwarded on request.

THE POOTATUCK CORPORATION

2448 MAIN STREET

STRATFORD, CONNECTICUT



SIX INCH STROKE CRANK SHAPER.

AUTOMATIC CROSS FEED 10 INCHES. VERTICAL FEED 4½ INCHES. TOOL FEED 1½ INCHES. TABLE 7 INCHES SQUARE.

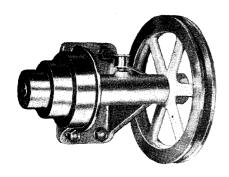
Half and quarter full size construction drawings of Shaper, price 25 cents per set postpaid.

This is a useful, practical and well designed machine tool containing a number of features not found in other small shapers. Its entire construction is plain straightforward machine work easily accomplished in the average school or machine job shop. It has been designed as a small shaper — not just a larger design scaled down in size. The milling machine type knee, cross rail and table effectively overcomes chatter and tool wave common to many small shapers. The completed machine is of pleasing appearance and symmetrical proportions and will be found entirely satisfactorily in performance.

All angular ways are wide and deep. The tool head swivels to any angle and is locked by an eccentric binderbolt of simple construction. The ram may be fully positioned for commencement of stroke. The crank and bull gear with its integrally cast shaft are semi-steel castings.

SIX INCH SHAPER. The complete castings set consists of drawings and eighteen unfinished castings as follows:

COLUMN FRAME; CROSS RAIL; KNEE; TABLE; RAM; BULL GEAR; CRANK; BULL GEAR BEARING; PINION GEARSHAFT BEARING; TOOL HEAD; TOOL HEAD SWIVEL; CONE PULLEY; AUTO-FEED CRANK; BRONZE RATCHET FEED BOX; BASE FOR SWIVEL VISE; COUNTERSHAFT; COUNTERSHAFT CONE PULLEY; COUNTERSHAFT DRIVE PULLEY.



COUNTERSHAFT. This Countershaft may be used to drive any of our bench machines. It may be mounted on the wall directly above and behind machine to be driven or mounted on the work bench. Drive is by individual motor, Bronze bearing bushings may be fitted if desired. Cone pulleys are not included with Countershaft castings set but are included with machine castings set. The large drive pulley is 8 inches diameter and may be grooved for ½ or 5% inch V-belt.

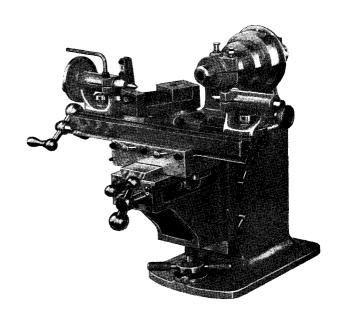
COUNTERSHAFT. The castings set consists of two unfinished castings as follows: COUNTERSHAFT FRAME; COUNTERSHAFT DRIVE PULLEY.

CAST IRON CASTINGS ARE EXPENSIVE! PRICES ARE ABOUT THREE TIMES PRE-WAR LEVELS. OUR CASTINGS ARE MADE IN ONE OF THE BEST EQUIPPED FOUNDRIES IN THE COUNTRY DEVOTED TO MAKING FINE QUALITY SOFT GREY CAST IRON CASTINGS FOR MACHINE TOOLS.

NO. 1 BENCH MILLING MACHINE.

LONGITUDINAL TABLE TRAVEL 6½ INCHES. TRAVERSE FEED 3 INCHES. VERTICAL FEED 3½ INCHES.

Half full size construction drawings of Miller and all accessories, price 25 cents per set postpaid.



The castings set will build a small milling machine well suited to the needs of metal working modelmakers and experimenters. It is ruggedly designed with husky spindle, oversize bearings and large diameter feed screws. It may be simply constructed using standard thread feed screws and disc machine handles, or more elaborately with 10 pitch Acme thread feed screws, ball machine handles, micrometer dials, adjustable table stops and other features found in expensive bench milling machines.

The completed machine stands 12 inches high, base to spindle. The table is $2\frac{3}{4}$ inches wide by 12 inches in length and may be fitted with one or two top T-slots or one top and one side T-slot for adjustable table stops. Bearings are plain cast iron cast integral with column casting and split on one side for adjustment of wear. The spindle is $1\frac{3}{16}$ inch diameter in front bearing and $1\frac{1}{8}$ inch in rear bearing. Spindle taper No. 2 Morse. Front spindle thrust is taken up on a ball thrust bearing and back thrust on hardened steel thrust washers. Thrust adjusting nuts provide close adjustment of spindle end play.

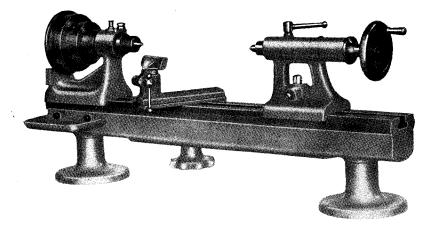
Longitudinal and cross feed screws are $\frac{1}{2}$ inch diameter. Vertical feed screw is $\frac{5}{8}$ inch diameter and is operated directly by a Capstan type hand wheel. Optional cone pulleys will be supplied, either a two-step pulley 3 and 4 inches diameter for 1 inch flat belt, or three step pulley $\frac{21}{2}$, $\frac{31}{2}$ and $\frac{41}{2}$ inches diameter for $\frac{1}{2}$ inch flat bottom A-belt.

Index Centers, Swivel Vise, Right Angle Table and Countershaft are included in complete castings set. The Index Centers swing 3 inches and have a single index plate cast integral with headstock casting. Recommended number of holes — 24. Only a base casting is supplied for swivel vise as vise body and movable jaw are best made of machine steel for lightness and strength. The Right Angle Table measures 2½ by 5¾ inches.

NO. 1 MILLER. The complete castings set consists of drawings and fifteen unfinished castings as follows:

COLUMN; KNEE; SADDLE; TABLE; TOOL TRAYS (2); OPTIONAL CONE PULLEY; CROSS FEED NUT BRACKET; INDEX HEADSTOCK; INDEX TAILSTOCK; BASE FOR SWIVEL VISE; RIGHT ANGLE TABLE; COUNTERSHAFT; COUNTERSHAFT CONE PULLEY; COUNTERSHAFT DRIVE PULLEY.

OUR CONSTRUCTION DRAWINGS ARE BLACK LINE PRINTS ON WHITE PAPER AND ARE MADE BY THE LOW COST "OFFSET" PRINTING METHOD. DETAILS ARE HALF FULL SIZE AND ASSEMBLIES QUARTER FULL SIZE. DRAWINGS MADE BY THE BLUE PRINT PROCESS WOULD COST TEN TIMES AS MUCH AS WE ASK FOR OUR DRAWINGS.

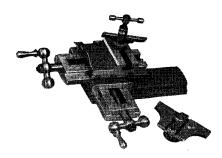


7 INCH SWING BENCH LATHE

Half full size construction drawings of Lathe and accessories, price 25 cents per set postpaid.

Carefully machined, scraped and fitted this set of castings will build a lathe equal in usefulness to many expensive bench precision lathes. It may well become the most used machine in your shop for accomplishing the thousand and one jobs that can best be done on a bench lathe such as machining small metal parts with slide rest, hand turning of metals and plastics, light metal spinning, filing, grinding, polishing and hand finishing operations on work machined in larger, slower speed engine lathes. It makes an excellent lathe for model makers and experimenters.

The heavy bed is 26 inches in length and is cored out only for passage of slide rest and hand rest binder bolt. The bed legs are separate castings fitting into machined recesses on bottom side of bed. Alignment of headstock and tailstock on the bed of the lathe is by conventional 60 degree angular ways. Distance between centers is 14 inches. The bearings are plain cast iron cast integral with headstock casting and split on one side for adjustment of wear. Spindle diameters are 1½ inch in front bearing and 1 inch in rear bearing. Spindle thrust is taken up on hardened steel thrust washers placed on each side of the front bearing. Spindle nose is 1½ inch 12 threads. Headstock center No. 2 and tailstock center No. 1 Morse taper. A thrust adjusting nut housed inside cone pulley maintains close spindle adjustment for end play. The tailstock is locked to the bed by a simply made eccentric binder bolt. Cone pulleys are 2, 3 and 4 inches diameter for 1 inch flat belt.



PLAIN SLIDE REST

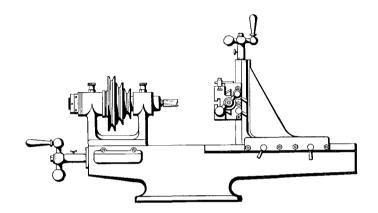
Included in the complete castings set is a Slide Rest and Countershaft. The Slide Rest is capable of rugged, accurate work. Longitudinal feed is 3½ inches and cross feed 3 inches. Feed screws are ½6 inch diameter and may be fitted with micrometer sleeves. Tools used are ½6 inch square tool bits. Alignment of the Slide Rest on the bed of the lathe is by a sliding shoe fitting into an underneath T-slot. Removal of shoe allows the Slide Rest to be set in any angular position desired for taper turning and boring.

Not shown in the illustration but included in castings sets is a 1¾ inch capacity Steady Rest, 4 inch Dog Drive Face Plate and 6½ Inch Face Plate, and two (2) Chuck Back Plates.

7 INCH BENCH LATHE. The complete castings set consists of drawings and twenty-three unfinished castings as follows:

BED; BED LEGS (2); HEADSTOCK; CONE PULLEY; TAILSTOCK; TAILSTOCK HAND WHEEL; TOOL TRAY; HAND REST; HAND NUT; T-REST; DOG DRIVE FACE PLATE; 6½ INCH FACE PLATE; CHUCK BACK PLATES (2); STEADY REST; SLIDE REST BASE; CROSS SLIDE; TOOL SLIDE; ALIGNMENT SHOE; COUNTERSHAFT; COUNTERSHAFT CONE PULLEY; COUNTERSHAFT DRIVE PULLEY.

OWNERS OF SMALL MACHINE JOB SHOPS CAN TURN IDLE TIME INTO PROFIT IN CONSTRUCTING MACHINE TOOLS FROM OUR CASTINGS SETS—EITHER AS MUCH NEEDED ADDITIONAL TOOL EQUIPMENT FOR THEIR OWN SHOP OR FOR RESALE AS FINISHED MACHINES.



NO. 10 BENCH MILLING MACHINE

TRAVERSE TRAVEL OF TABLE 61/2 INCHES. VERTICAL FEED 4 INCHES.

Half full size construction drawings of Miller and all accessories, price 25 cents per set postpaid.

This Milling Machine presents an unusual appearance but will be found well suited for many milling operations. It is, in effect, a vertical type milling machine although it lies in a horizontal plane. Work in progress is always in excellent vision of operator.

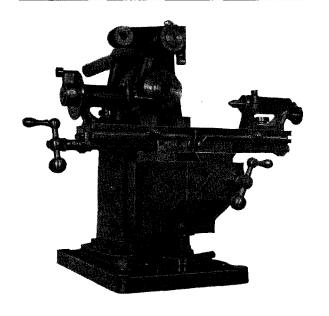
The bed is 22 inches in length and the longitudinal slide with its attached vertical column has 7 inches bearing surface on the 60 degree angular ways of the bed. The table and saddle are the same as used on No. 1 Miller.

The spindle head casting has large oversize bearings of plain cast iron split on one side for adjustment of wear. Spindle diameters are 1\(^{13/16}\) inches in front bearing and 1\(^{1}/8\) inches in rear bearing. Front spindle thrust is taken up on a ball thrust bearing and back thrust on hardened steel thrust washers. Thrust adjusting nuts are provided for. Spindle taper may be No. 1 or No. 2 Morse or No. 5 Brown and Sharpe. Vertical and cross feed screws are \(^{1}\)2 inch diameter and longitudinal feed screw \(^{5/8}\)8 inch. Micrometer dials may be fitted to all feed screws. Cone pulleys are 2\(^{1}\)2, 3\(^{1}\)2 and 4\(^{1}\)2 inches diameter for \(^{1}\)2 inch flat bottom A-belt. The complete castings set includes No. 1 Index Centers, Base for Swivel Vise and Countershaft.

NO. 10 MILLER. The complete castings set consists of drawings and fourteen unfinished castings as follows:

BED; TOOL TRAY; SPINDLE HEAD; CONE PULLEY; LONGITUDINAL SLIDE AND VERTICAL COLUMN; SADDLE; TABLE; LONGITUDINAL FEED NUT; INDEX HEAD-STOCK; INDEX TAILSTOCK; BASE FOR VISE; COUNTERSHAFT; COUNTERSHAFT CONE PULLEY; COUNTERSHAFT DRIVE PULLEY.

VOCATIONAL TRAINING, TRADE AND APPRENTICE SCHOOLS WILL FIND OUR CASTINGS SETS EXCELLENT PROJECTS FOR CLASSES IN MACHINE CONSTRUCTION.



NO. 2 BENCH MILLING MACHINE.

LONGITUDINAL
TABLE TRAVEL
8 INCHES. TRAVERSE
FEED 3½ INCHES.
VERTICAL FEED
4 INCHES.

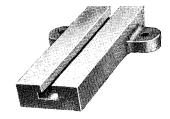
Quarter and Half full size construction drawings of Miller, accessories and attachments, price 25 cents per set postpaid.

This Milling Machine will prove a useful addition to the tool equipment of any shop for model, instrument and experimental machine work. Shops equipped with a single large miller may easily complete this castings set and have a miller well suited for economically handling the smaller jobs within its capacity. The machine work, fitting and assembly will be found very easy to accomplish.

The machine stands 14 inches high, base to spindle, and 17¾ inches, base to overarm. Tables are 3½ inches wide by 15 inches in length and may be fitted with one or two top T-slots and a side T-slot for adjustable table stops. The large diameter longitudinal and cross feed screws are 5½ inch diameter 10 pitch Acme or square threads and may be fitted with micrometer sleeves. The vertical feed screw is ¾ inch diameter 6 or 8 square threads per inch and is operated directly by a simple Capstan type hand wheel.



Plain Index Centers included in complete castings set.

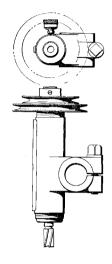


Right Angle Table included in complete castings set.

Spindle diameters are 13% inches in front bearing and 11/4 inches in rear bearing. Spindle taper may be No. 2 or 3 Morse or No. 7 Brown and Sharpe. Front spindle thrust is taken up on a standard

ball thrust bearing and back thrust on hardened steel thrust washers. Thrust adjusting nuts maintain close adjustment of spindle end play. Optional cone pulleys will be supplied, either $2\frac{1}{2}$, $3\frac{1}{2}$ and $4\frac{1}{2}$ inches diameter for $1\frac{1}{8}$ inch flat belt, or $3\frac{1}{4}$, $3\frac{3}{4}$, $4\frac{1}{4}$ and $4\frac{3}{4}$ inches diameter for $1\frac{1}{2}$ inch flat bottom A-belt.

Bearings are plain cast iron flanged sleeve bearings. If the builder chooses he may substitute ball or roller bearings, split tapered bronze draw bearing and draw nut for front bearing and plain bronze sleeve bearing for rear bearing.



Included in the complete castings set are 4 inch swing plain Index Centers, Base for Swivel Vise, Right Angle Table, Vertical Attachment and Countershaft. The Index Centers are simply designed and easily constructed and are suitable for all indexing operations not requiring extreme precision. Index Plates are changeable and two are included in castings set. Recommended number of holes 24 and 30. Quill diameter is ^{15/16} inch, quill nose 1 inch 12 threads. Center No. 1 Morse taper. Only the base casting is supplied for Swivel Vise as vise body and movable jaw are best made of machine steel for lightness and strength. The vise operates on the tapered split base principle. If made according to drawings it will be 2½ inches wide, 1 inch deep and will open 2½ inches. The Right Angle Table measures 3 by 7 inches and is a useful accessory when used in conjunction with Index Headstock, angle plates and Swivel Vise.

Vertical Milling Attachment

The Vertical Milling Attachment clamps to the $1\frac{1}{4}$ inch diameter overarm and is set in a vertical and angular position with the aid of a machinist's bevel protractor aligned with a machined rib on the side of the body casting. It is not a precision tool but will be found useful for many vertical milling jobs. The spindle is $\frac{7}{8}$ inch diameter and runs in long bronze sleeve bearings pressed into each end of the body casting. Thrust washers and thrust adjusting nuts are provided for. Spindle taper No. 1 Morse or No. 5 Brown and Sharpe. Cone pulleys are $3\frac{1}{2}$ by $4\frac{1}{2}$ inches diameter for drive by round twisted belt from an individual $\frac{1}{4}$ H.P. motor.

NO. 2 MILLER. The complete castings set consists of drawings and twenty-three unfinished castings as follows:

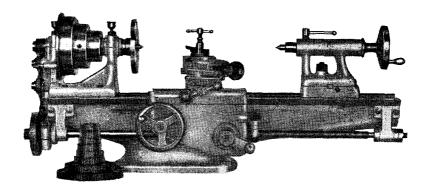
COLUMN; BASE PLATE; KNEE; SADDLE; TABLE; OVERARM BRACKET; TOOL TRAYS (2); BEARINGS (2); OPTIONAL CONE PULLEY; CROSS FEED NUT BRACKET; INDEX HEADSTOCK; INDEX PLATES (2); INDEX TAILSTOCK; BASE FOR SWIVEL VISE; RIGHT ANGLE TABLE; VERTICAL MILLING ATTACHMENT; ATTACHMENT CONE PULLEY; COUNTERSHAFT; COUNTERSHAFT CONE PULLEY; COUNTERSHAFT DRIVE PULLEY.

IF YOU HAVE THE FACILITIES OF A SMALL MACHINE SHOP AT YOUR DISPOSAL AND HAVE SOME MECHANICAL SKILL, YOU CAN SAVE UP TO 80 PERCENT OF THE COST OF COMPARABLE NEW MACHINE TOOLS BY COMPLETING ONE OR MORE OF OUR CASTINGS SETS. YOU WILL, INCIDENTALLY, RECEIVE MUCH PROFITABLE EXPERIENCE AND ENJOYMENT IN THEIR CONSTRUCTION. YOU NEED NOT BE AN EXPERT JOURNEYMAN MACHINIST TO UNDERTAKE ONE OF OUR PROJECTS. IF YOU CAN READ SIMPLE BLUE PRINTS AND DO ORDINARY WORK ON BASIC MACHINE TOOLS YOU CAN COMPLETE ANY OF OUR MACHINES.

The 8 Inch Swing

"MODELMAKER"

SCREW CUTTING LATHE



Quarter and half full size construction drawings of lathe, accessories and attachments, price 25 cents per set postpaid.

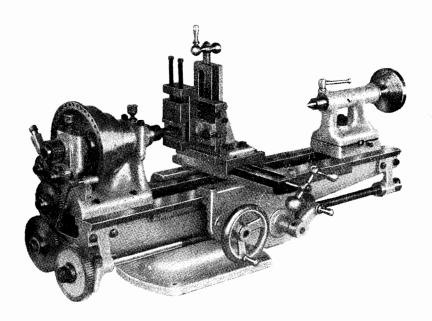
Building this lathe is an excellent project for classes in machine construction in Vocational and Trade Schools. With its attachments it is a complete small machine shop within itself. The bed is 28 inches in length and is strongly cross braced. A single V-way aligns the headstock and tailstock and a front angular way and rear square way aligns the carriage. Distance between centers is 15 inches. Headstock spindle diameters are $1\frac{1}{16}$ inch in front bearing and 1 inch in rear bearing. Spindle nose $1\frac{1}{16}$ inch 12 threads. Centers No. 1 Morse taper. Bearings are plain cast iron cast integral with headstock casting and split on one side for adjustment of wear.



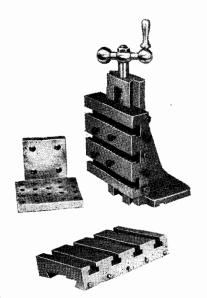
Steady Rest Supplied Has Capacity of 2½ inches.

The leadscrew is ½6 inch diameter 10 right hand square threads per inch. A single half nut is raised to engage the leadscrew by means of an eccentric actuated slide of simple construction. Design includes swivel compound rest, set-over tailstock, carriage lock, dial thread indicator, index pin for indexing cone pulley, thrust adjusting nut and other features. Optional cone pulleys will be supplied, either 2½, 3½ and 4½ inches diameter for 1 inch flat belt, or 3, 4 and 5 inches diameter for ½ inch flat bottom A-belt.

Gears are 24 pitch except rack and carriage gears which are 20 pitch. All change gears fit on the leadscrew and each gear cuts two different threads depending on which fixed compound stud gear is in train with idler and change gear. All standard threads from 8 to 80, right or left hand, may be cut. Included in the complete castings set are castings for constructing a Milling and Boring Table, a Vertical Milling Attachment, Hand Shaper Attachment, Grinding Attachment and Countershaft.



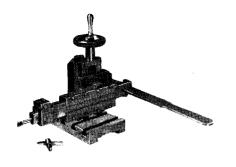
Left Hand View of the "Modelmaker" Lathe Showing Milling Attachment
Set up on Milling and Boring Table Cross Slide.



Vertical Milling Attachment and Milling and Boring Table Cross Slide.

The Milling and Boring Table measures 3½ by 5 inches. It is to be machined with four equally spaced T-slots and be fitted with its own gib and feed nut in order to quickly interchange with the regular cross slide. It is, by itself, a useful accessory for many milling and boring bar operations besides providing a rigid foundation for mounting the Milling, Grinding and Hand Shaper Attachments.

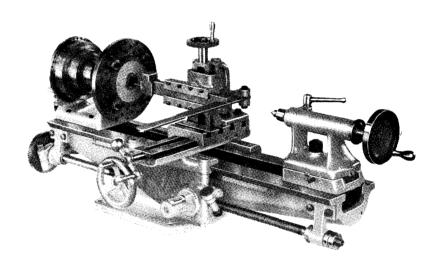
The Vertical Milling Attachment consists of a column having a four inch square T-slot slide for mounting work, swivel vise or angle plate. The bottom of the column has crossed keys which allows it to be set in various positions on the Milling and Boring Table, facing or at right angles to the lathe spindle. An angle plate and base for No. 1 Swivel Vise are included accessories.



Hand Shaper Attachment Mounted on Milling and Boring Table Cross Slide.

The Hand Shaper attachment is useful for cutting internal keyways and shapes and for small planing operations on work held in a chuck or attached to a face plate. Vertical adjustment of the ram slide is 2 inches and maximum stroke of ram is 1½ inches.

The Internal and External Grinding Attachment may be adjusted for height and set at any desired angle. Maximum size wheels 1/4 by 3 inches. Drive is by round belt from a small motor.



Right Hand View of the "Modelmaker" Lathe Showing the Hand Shaper Attachment Set up on the Milling and Boring Table Cross Slide.

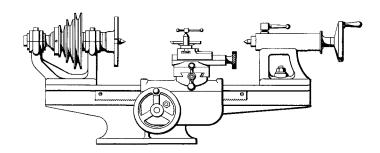
"MODELMAKER" LATHE. The complete castings set consists of drawings thirty-nine unfinished castings for construction of Lathe, Milling and Boring Table, Milling Attachment, Grinding Attachment, Hand Shaper Attachment and Countershaft as follows:

BED; CARRIAGE; APRON; CARRIAGE HAND WHEEL; HALF NUT OPERATING LEVER; CROSS SLIDE; COMPOUND REST; TOOL SLIDE; HEADSTOCK; DOG DRIVE FACE PLATE; 6½ INCH FACE PLATE; TAILSTOCK; TAILSTOCK BASE; TAILSTOCK HAND WHEEL; CHUCK BACK PLATES (2); TUMBLER GEAR PLATE; IDLER GEAR BRACKET; LEADSCREW BEARING BRACKETS (2); OPTIONAL CONE PULLEY; BRONZE DIAL THREAD INDICATOR; CHANGE GEARS (4); MILLING AND BORING TABLE; STEADY

REST; VERTICAL MILLING COLUMN; MILLING TABLE; ANGLE PLATE; BASE FOR NO. 1 SWIVEL VISE; HAND SHAPER COLUMN; RAM SLIDE; LINK; GRINDER QUILL CARRIER; COUNTERSHAFT; COUNTERSHAFT CONE PULLEY; COUNTERSHAFT DRIVE PULLEY.

Available accessories also include:

- A. CUT STEEL RACK.
- B. SPINDLE GEAR, TWO TUMBLER GEARS, COMPOUND STUD GEARS; IDLER GEAR, PINION GEAR-SHAFT, REDUCTION AND RACK GEAR, GEAR FOR DIAL THREAD INDICTOR.
- C. SEVEN CHANGE GEARS PLUS MACHINE WORK ON FOUR CAST IRON GEARS.



THE "TYRO" BENCH

LATHE WITH HAND OPERATED CARRIAGE 7 INCH SWING, 22 INCH BED.
MILLING AND GRINDING ATTACHMENTS.

Half full size construction drawings, 25 cents per set postpaid.

This practical model is of great instructional value for the vocational school, and very useful for the modelmaker.

The heavy bed is 22 inches long, the ways are flat and therefore are simplest to machine, whether on a planer, large shaper, horizontal, or vertical spindle miller. Distance between centers is 10 inches. Headstock spindle diameters are ^{15/16} inches front bearing, 7/8 inches in rear bearing. Center No. 1 Morse taper. Bearings are removable cap split bronze and can be adjusted to compensate for wear or to correct machining errors. Cone pulleys are 21/2, 31/2 and 41/2 inches diameter.

Not shown in the illustration but included in castings sets is a 13/4 inch capacity Steady Rest, 61/2 inch Face plate and (2) Chuck Back Plates.

TYRO BENCH LATHE. The complete castings set consists of drawings and 21 unfinished castings as follows:

BED; CARRIAGE; APRON; CROSS SLIDE; COMPOUND REST; TOOL SLIDE; CARRIAGE HANDWHEEL; HEADSTOCK; BEARING CAPS (2); CONE PULLEY (2); TAILSTOCK; TAILSTOCK HANDWHEEL; DOG FACE PLATE; 6½ INCH FACE PLATE; STEADY REST; CHUCK BACK PLATE (2); COUNTERSHAFT BRACKET; COUNTERSHAFT DRIVE PULLEY.

Available accessories also include:

CUT STEEL RACK; RACK GEAR; REDUCTION GEAR; PINION GEAR SHAFT.

THE POOTATUCK CORPORATION

2448 MAIN STREET
STRATFORD, CONNECTICUT