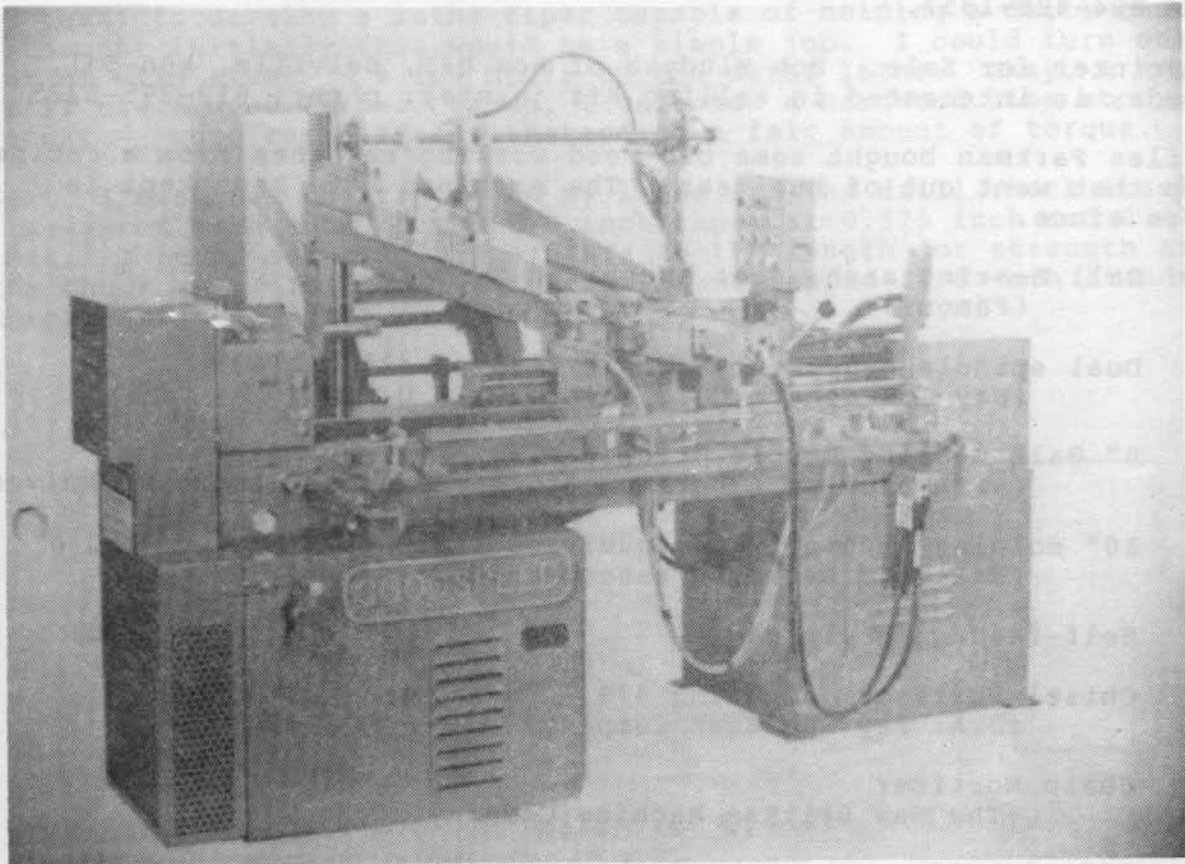


# ANTIQUE WOODWORKING POWER TOOL ASSOCIATION

© 1990



Goodspeed Machine Company Model FH Lathe, 1987.

FEBRUARY 1990

JOURNAL # 16

Well I hope Everyone made it through the holiday season okay.

Recently, I have been keeping my shop at about 50° F. And when I start gluing I raise the temperature to 75° for a couple of days. What I have been doing in addition is microwaving my wood glue. I heat it up, right in the plastic bottle, until it is very warm, at least 100° F or so. I use a little more glue than previously, but the joint seems to be much stronger.

walt

FYI - The 1990 Mid-Atlantic Woodcarving show & Competition is March 31 through April 1. (Sat & Sun 10:00am to 5:00pm) Donation \$3.00. Where: The Penn State Abington Campus Gym. in Abington PA.

Bill Myers is interested in purchasing a Universal Wood Worker, if he can find one in the Virginia Beach/Norfolk VA area. You can get in touch with Bill at 804-428-0259, or fax him a message on this FAX line 804-428-1357.

8" Jointer for Sale, Bob Wludyka of Box B41, Belville, k8n-5j1, Canada, is interested in selling his jointer. phone: 613-395-5225.

Charles Parkman bought some old wood working machines from a cabinet shop that went out of business. The machines have been kept in doors since.

Ball Bearing sash, door and blind Tenoner  
(Famous)

Dual spindle heavy-duty shaper (48" X 42" table)  
(Hay & Brothers CO., Aurora, Ill U.S.A.)

6" Ball Bearing Double Sticker #130 (Hall and Brown)  
(with plowing & boring attachment & assortment of knives)

10" molding machine w/ 4 square cutting heads  
(Hall and Brown, w/assortment of knives)

Self-feed gang rip saw

Chisel Mortiser, Lighting 479  
(J.A. Fay and Egan Company)

Chain Mortiser  
(The New Britian Machine Company, Conn U.S.A.)

30", 2 knife, square head thickness Planer, #147  
(J.A. Fay and Egan Company, Cincin. OH, U.S.A.)

Anyone interested can contact Charles at 6618 Sawyer RD, San Antonio, TX 78238, PH#: 512-681-5874

For Sale: Yates American combination saw, jointer, and sander with extension arms, catalog No. 40 W140. Purchased new in 1953, and its in perfect condition. It's planner was used three times. Richard Mutsch can be reached at 414-786-3781. Richard lives in New Berlin, WI.

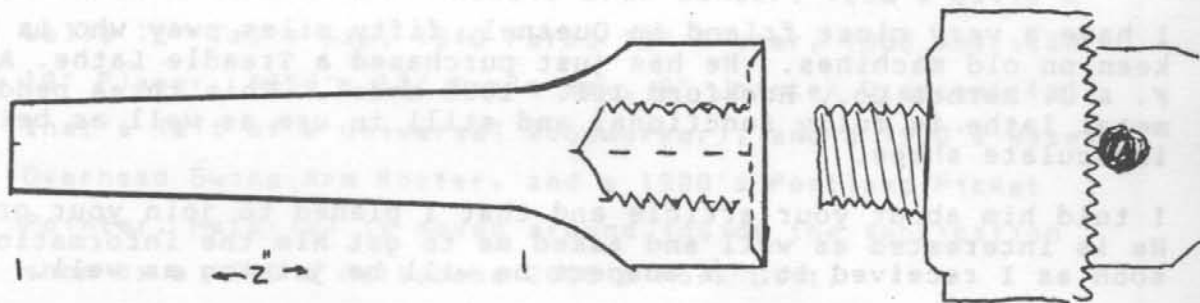
## USE THOSE DRILL (LATHE) CHUCKS by walt vinoski

Why do I use this 15 year old drill? It runs slow, overheats and smokes! I use it only with spade bits. Finally it dies, as a large cloud of smoke billows from its guts. Actually, I believe these electrical appliances run on smoke. Some say they run on electricity, but have you ever seen electricity? I haven't. I have noticed things do begin to smoke when they're in use; and the more smoke that leaks out the slower the tool runs. In fact it will keep on running until all the smoke leaks out.

So what do you do with departed tools? I strip them down and keep the chord, keys, chucks, and some hardware. All of this was discussed one afternoon with Lewis Lorini. He said he had a good project idea and asked if I had any extra drill chucks. "Why, yes, I do," I replied.

My task: to develop a lathe taper capable of holding a drill chuck. I thought initially this would be a simple job. I could turn one out of mild steel in a few hours on the metal lathe. Okay, I know, we'll use a wood lathe. First, I selected a hardwood like ebony, or locust - wood capable of withstanding a fair amount of torque.

Next, I examined the tapers on my lathe and the drill chuck itself. I measured both ends of the 2.0 inch taper at 0.375 inch and 0.475 inch. I added about 1.0 inch extra to the length for strength at the chuck end. This end gets drilled and tapped (3/8 inch standard thread) to accept the chuck.



\* Actual Morse taper #1 Hole is 0.369 to 0.475

I roughed in the contour and brought the two ends of the taper to within a few thousandths of an inch of the actual size. On the chuck end of the taper, I left the diameter of the cylinder at 7/8 inch and approximately 1 inch long. To eliminate weak spots, fair the large end of the taper into the 7/8 inch diameter cylinder. I used a full 1/2 inch for the fairing radius.

Using a flat surface sanding block, I sanded the taper down to the exact dimension. (I also made the taper slightly longer, so it could be trimmed .) Instead of cutting the face flush, I cut an indentation to match the back of the chuck. After trimming both ends of the taper, I tried to slide it into my lathe, rotating it as I slid it in an out. The lathe will leave marks on the taper, indicating the location of the high spots. I then sanded down the high spots slightly.



With a drill press and a piece of soft scrap wood I located the center of the taper, drilled a 7/16 inch hole all the way through the wood, and then pressed the taper in place, without moving the scrap wood guide. Next, I drilled a 5/16 inch diameter hole approximately 3/4 inch deep and tapped this hole with a 3/8 inch diameter standard thread tap. (If you don't have one, use a bolt instead.) File two or three axial grooves in the threads, so the bolt will cut the wood as it enters. (Similar to a sheet metal screw.)

Finally, I screwed in the chuck and tested it out in my lathe. After I was sure it was working the way I wanted it to, I reinserted the chuck with a thread locking compound.

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Howard Lobb writes from Canada

I would like to join the rest of you in the AWPTA. I work in a historic museum town called Barkerville. I am a 1870's character doing Victorian cabinet making. I also have a shop in the near by town of Wells where I live. This is a small 1930's mining community would like to be in contact with people who know about and use old beauties like the one's you have found.

I have a very close friend in Quesnel, fifty miles away who is also keen on old machines. He has just purchased a Treadle Lathe. A W. F. & J. Barnes Co., Rockford Ill. 1889 model. This three peddle metal lathe is fully functional and still in use as well as being in immaculate shape.

I told him about your article and that I planed to join your group. He is interested as well and asked me to get him the information as soon as I received it. I suspect he will be joining as well.

Arnold does black smithing and woodworking and is an avid collector and trader.

I am now searching for a Miller Falls Boring Machine that is excellent shape as I would like to be using it almost daily in my job as a 1870's cabinetmaker. As well as in building my new blacksmith shop. If any body has one please send me a photo, and a price. Howard Lobb, POB 107, Well B.C., CANADA VOK 2R0. ph# 994-3282



# Blue Ox Millworks

*Specializing in Reproduction & Custom Millwork*

February 7, 1990

Dear Walt,

I recently received my first copies of Antique Woodworking Power Tool Association, (Aug. & Nov). Is there a way to get any/all of the back issues? It was wonderful to see that there are others that share the same enthusiasm and respect for the machinery of the past as I do. I own and operate a working Millwork Museum. We reproduce Victorian Moulding and Wood Gutter, Hand Rail and other specialties using a circa 1902 Woods 6"x12", and a 1919 Hermance 4"x8" 4-side Moulding Machine both run off of under floor line shafts. We make Columns up to 16' long on a 1880's Fitchburg Machinery Co. Lathe with a 30" swing. We also make balusters and newel posts using a 1800's Goodspeed and a 1940's Delta Lathe both with 6' beds and 10" swing. Shop tools include 1930's Moak 36" Bandsaw with 36" throat, 1886 Smith Tennonner, 1900's Heath Double Drum Sander, 1930's Davis & Wells 12" Table Saw, 1940 Parks 12" Planer, 1903 American 18" Planer, 1950's 12" Table Saw, 8" Jointer Crescent (all that's left of a Universal Woodworker), and a 1900's Wesel Overhead Swing Arm Router, and a 1900's Portland Picket Pointer. Material is moved around inside the fabrication shop by a 1940's Pettybone 2000lb Fork Lift.

The sawmill building houses a 1940's very modified Bell Saw Sawmill with a 52" circle blade, 1930's Corinth Adjustable Gang Edger, 1940's Moffit 36' Power Feed Resaw, all run by under floor line shafts. The air is supplied by a 1920's Ingersoll-Rand 7"x 6" Compressor and a 1903 Eureka Boiler Works 400 gal Storage Tank. Also in the sawmill building is a 1900's 26" Yates American Air-powered Cut Off Saw (for cants to 12"). With the conveyers and rolls, the entire sawmill is 1940 technology at it's best! The Shingle Mill houses a 1902 Sumner Automatic Shingle Machine.

Blue Ox Millworks Foot of X Street Eureka, CA 95501 (707)444-3437





# Blue Ox Millworks

Specializing in Reproduction & Custom Millwork

The Machine Shop that restores and keeps all this wonderful "stuff" going has a 1906 South Bend Lathe, 1900's Superior 1" Drill Press, 100 Ton 1900's Rock River Stamp Press, 1900 Smith & Mills Powered Shaper, 1900's Champion Blower & 30" Forge, 1920 Lemco 25 Ton Press (serial # 40), Power Hack Saw, 1890's Champion Forge & Blower Co. Hand-powered Drill Press, (the only drill I've seen that will drill through spring steel with a steel bit). A key piece of equipment is our 1940 Hobart Bros. 300 Amp Portable Arch Welder, and a fun one is our 1928 Elwell Parker self-propelled Electric Crane

Out in the yard, the work horses are a 1949 Gurlinger 16,000 LB. Fork Lift and a 1948 Payloader Bucket used for sawdust removal. We also have a 1955 Dodge Cabover. Some tools not yet in operation are two 1900 Drag Saws, two Hit and Miss Gas Engines and a 1900's San Francisco Ironworks Steam Pressure Vessel with P.F. Dundor Doors for bending gutter and other wood products.

Well, that's about all for now, but if you would like any other information or photos please feel free to call me at 800-248-4259. I have some literature and a lot of practical experience.

Sincerely,

Eric Hollenbeck

P.S. Armstrong makes the planer bolts referred to on the August issue. Their bolts are T-SLOT BOLTS on page 151 of their current catalog. These are not as hard as the original and require some additional machining but are only a buck or two each with nuts. The original bolts can be had from Wisconsin Knife Works, phone # 800 225-5959 Item # NF 101.

Blue Ox Millworks Foot of X Street Eureka, CA 95501 (707)444-3437



# GOODSPEED LATHES--PAST AND PRESENT

## PART TWO (THE PRESENT)

BY

DANA MARTIN PATORY

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We jump from the 1870s to the 1980s and discover Goodspeed has kept up with developing technology. The simple hand-operated back-knife lathe has evolved into the AV Type Automatic Self-Feeding Variety Lathe and the Model FH Hydraulic-Automatic-Lopper Fed Back-Knife Lathe. See front cover.

The variety lathe is distinguished by the fact that the stock need not be cut to workpiece length before insertion. The long squares are rotated at high speed and fed axially past a roughing tool that forms a dowel of the proper diameter to fit snugly into the adjacent support die. The emerging dowel is advanced beyond the die the desired length. The





turning is then formed with a milled-to-pattern knife, end-chucked (bored) if needed by a tool in the tail stock, and finally cut off from the dowel by a pivoted or slide mounted parting tool. The major disadvantage of a variety lathe is the waste of material because the lathe can't utilize the last few inches of stock.

The ball bearing, motor or belt driven AVs will do smooth and accurate turning from a wide assortment of air dried or kiln dried hardwoods. Turnings can be reproduced from the smallest size up to 3 inches in diameter and 6 inches long. Skilled labor isn't needed to feed the machines. They are capable of taking a bar of rough square or round stock up to 3 inches diameter 24 to 30 inches long (depending on machine) and converting it into delicate spindles in various shapes and sizes--ornamental items, chair plugs, beads, golf tees, knife handles, bushings, balls, checkers, wheels, etc.--at the rate of 500 to 3600 pieces per hour depending on length, diameter, and shape. Beech, maple, gumwood, and white birch are the recommended turning materials.

The head stock is the sliding type. The tail stock is cast in one piece with removable ball bearings to hold a boring bar and adjustable for wear. A tenon attachment can be quickly installed.

Feed changes are accomplished by two pinon gears giving ratios of  $4\frac{1}{2}$  to 1 and 6 to 1. In addition, two three-step cone pulleys on the countershaft can be switched around giving additional speeds. The 5 or  $7\frac{1}{2}$  horse ball bearing motor has a two step V-belt drive to the spindle giving two-spindle speeds.



The forming knife holder permits quick adjustment of the shaping tool for diameter of work and also has side adjustment to vary the diameter of each end of turning without the use of shims. The roughing knife holder has micrometer in and out adjustment for lead of knife and adjustment up and down for diameter.. The roughing knife, as well as all other knives, is made of high carbon tool steel or high speed steel. The lathes are offered with four types of cutting off attachments.

The No. AV-4B motor driven (7½ horse) lathe with a 3-inch diameter by 6-inch long capacity sold for \$23,495 in 1986.

The top of the line is the FH Back-knife Lathe available in 30, 40, and 45 inches capacity.

Hydraulically controlled, hopper fed (3-inch maximum diameter), and automatically operated, the model features high production, quality turnings (requires less sanding), materials savings, deeper cuts, less set-up time, safety, and low cost precision tooling.

Incorporating features of the old back knife lathe and adding new, its more outstanding features are a sliding tailstock for easier turning removal, a two speed carriage for normal and difficult turning situations, an automatic end pressure reducing system for slender turnings, an adjustable no-shim knife bar to insure proper knife clearance depending on turning shape and wood species, a top support for the sash guide bar to insure smoother more rapid turning, a hardened steel bed way (ground, polished, and hard

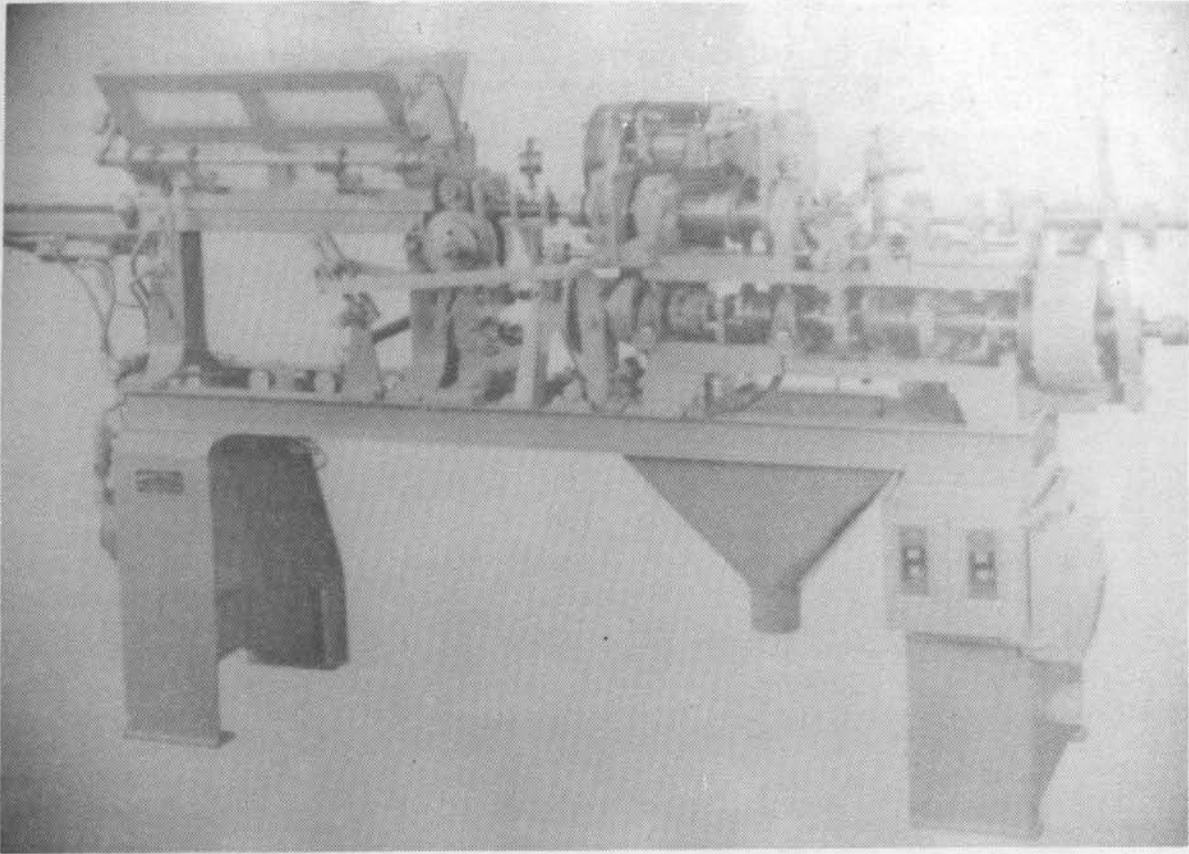
chrome plated) for longer life, double bearings top and bottom for the guide side of the sash to improve stability and longer bearing life, and one operator can feed up to five machines.

When joined with a tracing attachment the FH becomes the Model C--a combination production and sample making lathe. Often sample turnings or very short runs are required and the Model C can be used as a copy lathe. In this mode no tooling costs are involved. A detailed template or sample turning can be traced. A single point tool does all the cutting. The Model C will produce up to 500 turnings per hour with the use of a back knife for long runs. The Model FH-45 C sells for \$48,050.

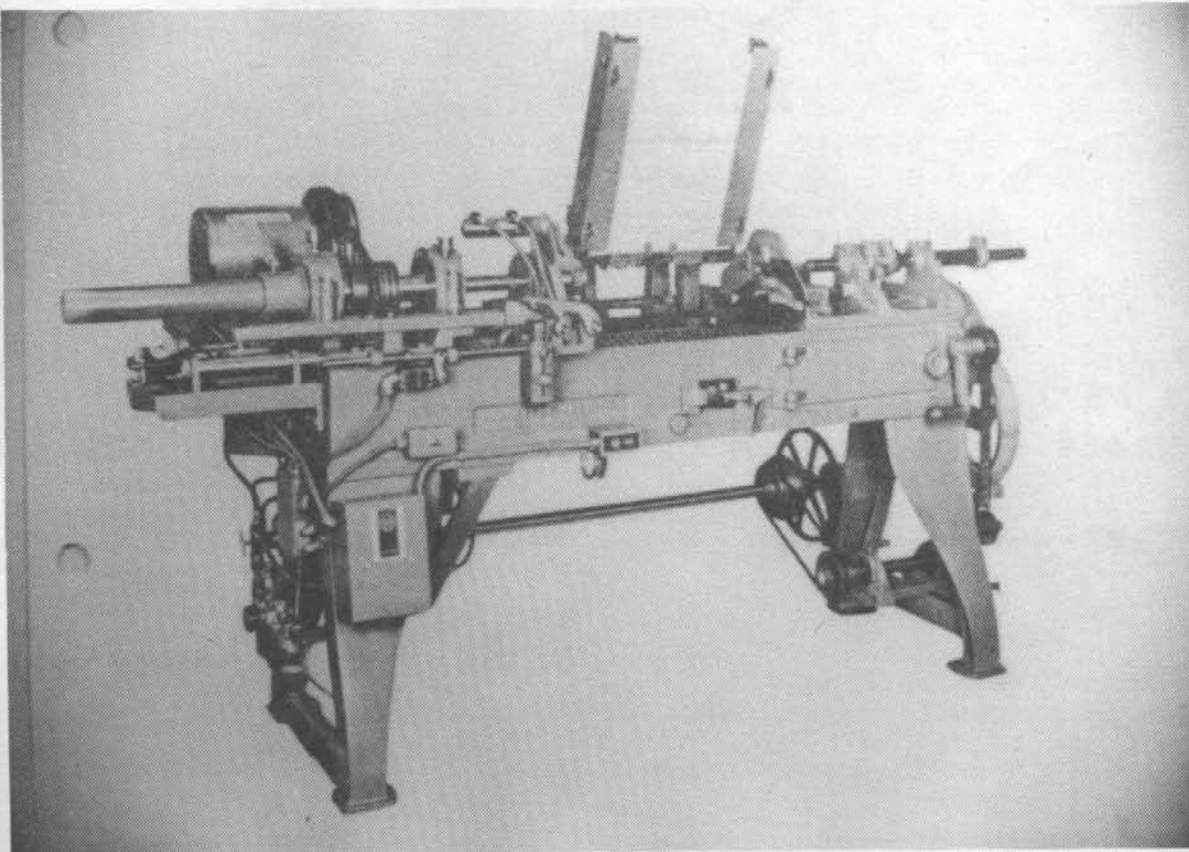
Goodspeed also makes the smaller capacity SV-Type Automatic Self-Feeding Variety Lathe, the CDB-21 Combination hopper Fed Motor Driven Turning And Chucking Machine which fills the gap between a variety and back knife lathe, and the Model BV Hollow Spindle Variety Lathe designed for producing a variety of small diameter wooden parts at high production rates. It is a combination air and cam operated machine allowing one operator to tend as many as six machines at a cycle rate of 25 to 100 parts per minute.

It's evident the Goodspeed reputation lives on.

In order to prepare a definitive history on American manufacturers of woodworking machinery, Dana is interested in acquiring by loan, gift, photocopy, or purchase (as a last resort!) any and all documents, catalogs, manuals, photos, etc. pertaining to the Goodspeed Machine Co. Write to Dana Martin Batory, 402 E. Bucyrus St., Crestline, Oh 44827.



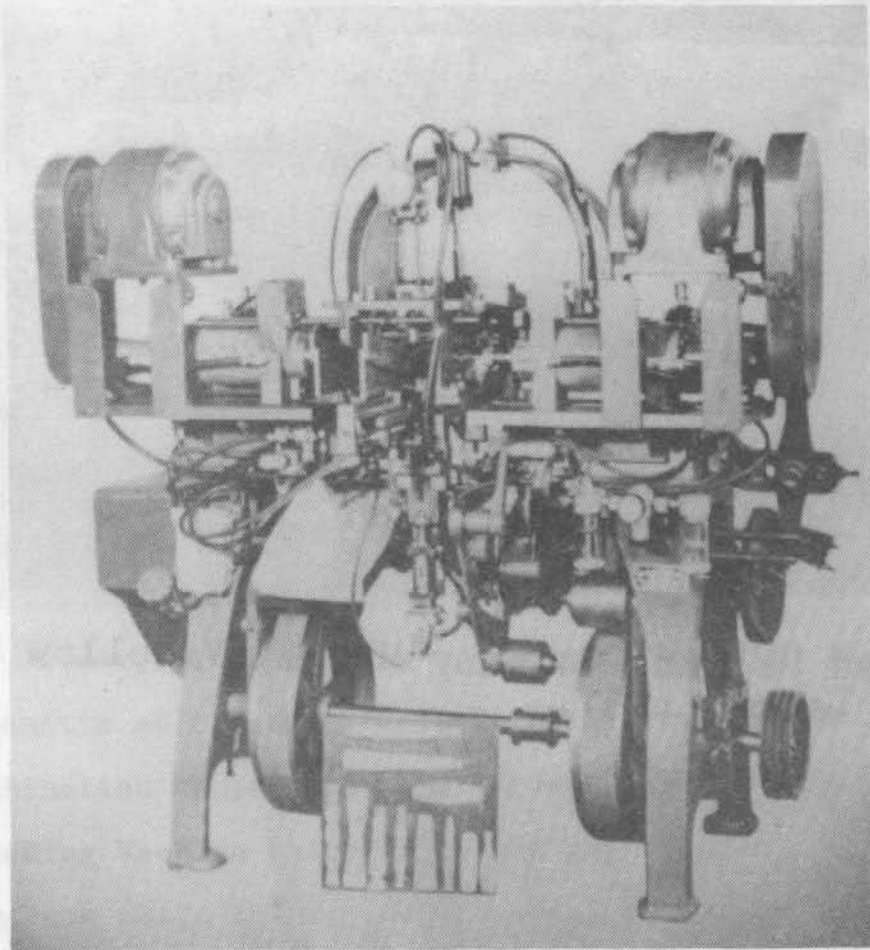
Goodspeed Machine Company Model BV Hollow Spindle Variety Lathe, 1987.



Goodspeed Machine Company Model SV-11 Variety Lathe, 1987.



Goodspeed Machine Company Model CDB-21 Turning  
And Chucking Machine, 1987.



The AWPTA membership dues, including  
a years subscription to the journal is \$10.00.

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