ANTIQUE WOODWORKING POWER TOOL ASSOCIATION

NEWSLETTER NUMBER 4 - JUNE 1987

Advertisement from
AMERICAN CARPENTER AND BUILDER
JULY 1915 ISSUE

New members since last issue:

Walter S. Vinoski, 305 East Youghiogheny Ave., South Connellsville, PA 15425
Dick Miller, POB 372, Hopewell Jct., NY 12533
Richard C. Downing, 9644 E. Raymond St., Indianapolis, IN 46239
Randall Courts, 20518 Upper Hillview Dr., Sonora, CA 95370
William L. Boyer, Rt. 2, Box 155, Whitestown, IN 46075
Hubert A. Loeffler, Sr., 30 Park Place, Saratoga Springs NY 12866
Grace Allison, 7968 Venice Dr. N.E., Warren, OH 44484
Ron Symons, 33431 Spiedel Rd., Lisbon, OH 44432
J. H. Hendrie, POB 358, Venus, FL 33960
John C. Roberts, 1406 S 30th St., St. Joseph, MO 64507
Daniel C. Fischer, 2213 Vine St., Berkeley, CA 94709
Michael L. Brown, 1222 S. Second, Greenville, IL 62246
Herman Properties, 18320 Tarzana Dr., Tarzana, CA 91356
John Bellingham, 336 N. Fairview, Lansing, MI 48912
Stanley Davenport, 1500 S. Broadway, Denver, CO 80210
Andrew B. Worsnopp, 162 E. 7th St., New York, NY 10009
Larry Ice, Box 276, Crossnore, NC 28616
Shannon Gomes, RR 3, Waverly, IA 50677
R. J. McClure, Symsonia, KY 42082
Larry E. Mohney, RD 2, Box 2306, Stoneboro, PA 16153
Paul Dutkiewicz, 236 Derby St., West Newton, MA 02165
Frank R. Minor, 519 49th St. S.W., N. Industry, OH 44706
Bill Lindsey, 6243 58.25 Rd., Olathe, CO 81425
Ron Johnson, Rt. 3, Box 128, Chapel Hill, NC 27514

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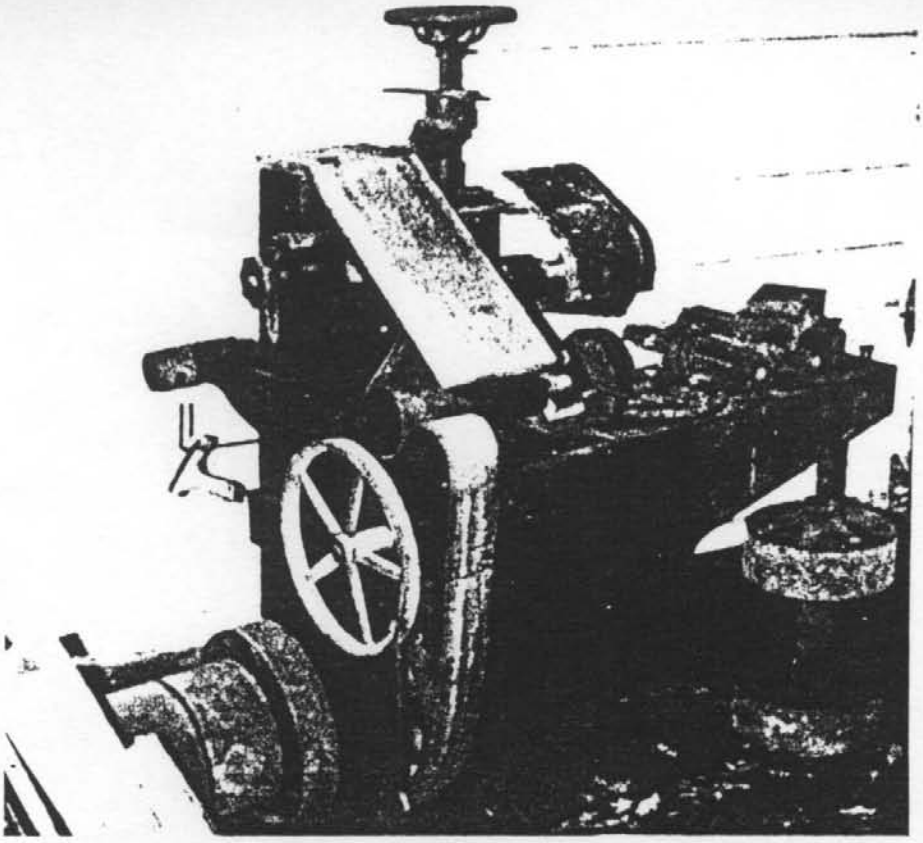
From Ron Johnson (address above) "I am a woodworker as well as an antique tool collector. I have been involved with these two pastimes for 5 years and have slowly been developing my skills and knowledge. Several years ago I bought and restored a wood lathe which was approx. 70 years old. I enjoyed that experience immensely, and would like to tackle something else - such as a universal wood-worker. If anyone could help me get started on this new project I would be most appreciative. My phone number is (919) 933-7628."

Frank R. Minor (addr. above) writes that he has a Universal Wood-Worker made by the Crescent Machine Co.



Mike Brown (1222 S. 2nd, Greenville, IL 62246) is seeking information on the above machine. "I know very little about it but I take it to be some sort of a planer but I may be wrong. I don't know if it is complete or if it is used with various attachments. The nameplate on the machine reads: The Bentel & Margedant Co. Manufacturers, Woodworking Machinery, Hamilton, Ohio, U.S.A." Can anyone help?

Bill Lindsey (6243 - 58.25 Rd., Olathe, CO 81425) has a Universal Wood-Worker and would like to know more about it. "the man I bought it from told me he bought it in a mining town back in the thirties and it was second hand then."

J. C. Hoelle (2231 Charlotte Ave., Ft. Wayne, IN 46805) has for sale: Goodell & Waters, Phila, Pa. Band Saw 35½" dia. wheels, heavy. Call 219-484-5755.

Larry Ice (Box 276, Crossnore, NC 28616): "I have a Crescent Universal Woodworking machine. I haven't seen a machine exactly like the one I have in any pictures or literature I've run across as yet. It consists of a 32" bandsaw, shaper, jointer & 14" table saw. I purchased the machine at an auction several years ago. Originally I wanted only the band saw but as things happen I never got around to putting everything back together after disassembly to move it. As far as I

(Continued on page 12)

ADVENTURES IN RESEARCHING

by Dana Martin Batory

You've knowingly purchased a piece of woodworking equipment at an auction or garage sale with broken or missing parts or later discovered it much to your annoyance. You want an owner's manual or you're just plain curious about the company which built it. Where do you go for help other than this newsletter?

The first step is to start at the beginning and find out whether or not the firm still even exists. If you haven't visited your local library since you were a kid, too bad. You'll have to now.

You can quickly check on this by consulting the "Thomas Register of American Manufacturers," the most complete directory of U.S. manufacturers now in print. The directory includes a list of manufacturers classified by product, arranged geographically with capital ratings; an alphabetical list of manufacturers, with their home and branch offices, subsidiaries, cable addresses, and phone numbers; and an alphabetical list of compnay trade names.

The similar (but out of print?) "MacRae's Blue Book," an annual directory of American industry, can provide additional company background information and like Thomas's, occasionally carries illustrated ads featuring machinery.

If the company still lives, then you're in good shape. If not, then more trips to the library lie ahead.

This is as good a place as any to discuss research etiquette. The people you'll deal with (especialy company representatives) are busy men and women. Even if they wanted to help, their duties make it impossible to devote much time to your requests. Treat them as a valuable resource. Be specific and clear in your questions and keep them few - no more than six. Use common sense. After all, you're the one who's doing the research, not them.

Be polite. Only once in hundreds of inquiries was courtesy returned with discourtesy to me. The

poor fellow rudely refused to answer any quesitons saying he was too busy. He then gave me a rambling five-minute lecture on how a real businessman's time is too valuable to waste and ended by slamming the receiver down. I might have believed him except for the fact I've personally dealt with the presidents and vice presidents of multi-million dollar companies. Luckily for us such people are aberrations. Always include a self-addressed, stamped envelope for their response.

If they can't or won't help, forget them and try some of the following sources. However, if they do provide assistance and offer to help again, go back later but only to have them answer or clarify questions subsequent research has revealed. Give them full particulars on the machine - type, model number, serial number, patent number, size, etc. Describe the part if necessary. You may have to go over every inch of the machine for a number and finally end up poking your head and a flashlight into the machine's innards and still finding nothing.

Obtaining more information on machine and/or company will take time, patience, work, and some money. Local sources will be the best help here. Contact the library located in the manufacturer's home town. The "American Library Directory" lists public libraries; state and regional library systems; junior-college, college, and university libraries; special libraries; private libraries; and government libraries. The arrangement is by state and city, covering the U.S., its territories, and Canada. Data given include special departments and collections. If this volume is unobtainable, a letter will usually get to the local library by simply addressing it: The (City) Public Library, (City), (State).

The questions in this and the following sources can be general in nature. I always call these fishing expeditions because you never know what will turn up. The quesitons should be along the lines of: Does the collection contain any material on the company? If so, what does it consist of? Can xerox copies be obtained? Their cost? Can they suggest additional or alternate sources of information?

In the matter of libraries, don't overlook state libraries, specialized libraries, and university libraries near the manufacturer. Local and state historical societies have nothing or next to nothing on manufacturing in their state. However, the New England states have done much along these lines. These societies are a bit harder to track down. The "Directory of Historical Societies and Agencies in the United States and Canada" lists national, state, and provincial historical organizations of all types. Likewise, the "Historical Societies in the Unites States and Canada: A Handbook." Arranged by state, this book is a directory of state and local historical societies, giving a brief run-down about each organization, its history, and its activities.

I have sometimes found the clipping files maintained by newspapers located in or near the manufacturer's town can provide a good deal of historical information. Their addresses can be found in the "Editor and Publisher's Market Guide" which lists the daily newspapers published in the U.S. and Canada under the names of the towns and cities where they appear. The most complete guide to the press of the U.S. and its possessions is the N.W. Ayer and Son's Directory of Newspapers and Periodicals." The basic list is arranged by state and city with addresses and publication and circulation data. Some papers have made a real effort to keep up their files, others only do it sporadically.

The Patent and Trademark Office of the United States Department of Commerce (Commissioner of Patents and Trademarks, Washington, DC 20231) can occasionally be helpful. Printed copies of any patent, identified by its patent number, may be purchased from the office at a $1 each postage fee.

However, if there is no patent number on the machine, then you're in big trouble. A search of Patent and Trademark Office records can only be made if the following data is provided:

1. The name of the inventor (the Office doesn't make searches by a manufacturer or by any other assignee of the patent rights.
2. The approximate date of the invention, or the years you wish to search.

3. The title or the subject matter of the invention.

The fee, paid in advance, for searching the records is $10 per half hour or fraction thereof. A ten year period can usually be done in that amount of time.

A final possible source of information are museums. The "Handbook of American Museums" provides a list of about 1400 museums of all types arranged geographically by city and state. It gives basic information about each institution's history, collections, and publications. Though out-of-date, much of the information is not subject to change. A Canadian list is appended.

My parting advice is - Don't give up.

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

Also from Dana Martin Batory: "In early March I was given a chance at a possible treasure trove of research material. I spoke with a Mr. James W. Judkins, Sr., Sales Coordinator at Botwinik Brothers Inc. of Worchester, MA, machine distributors and rebuilders since 1899. He informed me the firm is moving into small quarters and is disposing of some 40 to 50 files of old records (which I take to mean 40 or 50 file drawers full). He kindly offered me the entire collection free of charge to save it from its planned destruction. Unfortunately, I lack both transportation to and from Worchester and adequate storage facilities. Sadly, I had to pass up the offer. I thought it wise to inform the members in case anyone wants to pursue the matter. But act soon. I suggested Mr. Judkins contact the local historical society and library."

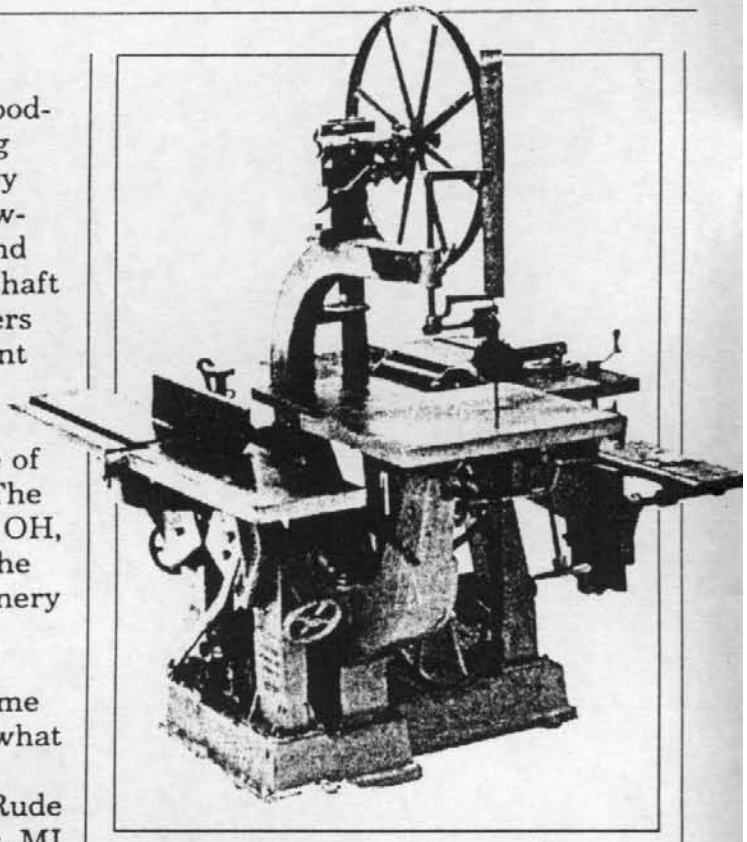
Address: Botwinik Brothers, Inc.
2 Sherman St., Box 428
Worchester, MA 01613-0428
Phone: (617) 756-5175

Mystery machine

I recently acquired a very old woodworking machine that I'm having trouble identifying. It has a heavy cast-iron base to which the following are attached: a table saw, band saw, jointer and shaper. A jack shaft on the base of the machine powers the operator's choice of equipment via the belt tighteners. It's about 7 ft. tall and 6 ft. sq., in excellent condition. Cast into the base of the machine is this inscription: The Crescent Machine Co., Leetonia, OH, U.S.A. A brass plate riveted to the machine reads: McMullin Machinery Co., Wood and Metal Working Machinery, Factory Equipment, Grand Rapids, MI. Can you tell me more about this equipment and what it's worth?

Randall Rude
Vestaburg, MI

"I am not familiar with the Crescent Machine Co. or the McMullin Machinery Co.," replies Harry Wicks, HM's executive editor and resident craftsman. "From the description, it sounds as if it may be the forerunner of the Shopsmith. I suggest you contact Shopsmith, 750 Vandalia Dr., Vandalia, OH 45377."



Shop tool has Babbit bearings and flat belts. It's now powered by a 3-hp electric motor; the original source was steam.

HOME MECHANIX/MAY, 1985

(The following article appeared in edited and abreviated form in the Oct. 6, 1986 issue of ANTIQUE WEEK. Historian Allison has sent us the original manuscript and it is presented here in its entirety.)

CRESCENT WOODWORKING MACHINES

by Grace C. Allison

A small query in the May 1985 HOME MECHANIX *(see above)* magazine about a woodworking machine started a chain of events that snowballed and touched the lives of people in many areas of the United States.

Since Crescent Machine Company has been out of business for nearly 35 years, information about this company and the woodworking machinery they manufactured for over 50 years was not readily available, but patience and perseverance by all interested parties

eventually paid off; and, in time, the gentleman from Michigan received correspondence from 22 states, including some from this Ohio writer.

Two expert machinists, Elmer Harrold and Clinton Wilderson, started a small machine shop c.a. 1895 in Leetonia, Ohio. Their business grew slowly but steadily and they soon hired men who were formerly employed at the local Mellinger Nold Planing Mill and started manufacturing woodworking machinery.

During the late 1890s John Royer built a small band saw, which he took to Crescent Machine Co. to have it fitted with a saw blade. At that time there was no entirely satisfactory band saw on the market as the endless blade either broke from constant flexing or the welded joint did not hold; but, after many experiments and considerable work, the engineering department of Creacent Machine accomplished the job of fitting Royer's small band saw with an adequate saw blade.

Realizing the importance of their engineering department's accomplishment, Harrold and Wilderson immediately made patterns and started producing a band saw c.a. 1898. By the turn of the century, the Crescent Machine Company, as Harrold and Wilderson named their shop, moved into a large building on Front Street, close to the old tool works. And, in 1908 Crescent Machine moved into a newly built, block-long building outside the village limits, at the end of Cherry Fork Street, alongside the railroad, where they also built their own foundry.

When Crescent Machine moved to its new location in 1908, production never ceased. The machines were moved one at a time and the operator went with his machine; just as soon as the machine was set in a preplanned position in the new factory, it was connected to the power line and the operator went to work immediately.

At that time, Crescent Band Saws were in use in seven different Navy Yards and other government institutions, as well as being used daily world-wide and Crescent Machine's success closely paralleled that of the Ford Motor Company, but on a smaller scale. In 1908 Henry Ford sold his first Model T for $850, while that same year Crescent band saws sold for about one-

tenth of the price of a Ford.

Crescent published a catalog in 1908, which Elmer Harrold compiled and copyrighted. In his catalog, Harrold advised customers that needed materials such as lumber, natural gas, sand, coal, coke, and pig iron were produced within a radius of one mile from the plant. He also mentioned that everything from the raw material to the finished machines was made in one plant, under one management.

Crescent's 1908 catalog illustrated their regular products, viz: band saws, table saws, jointers, disk grinders, shapers, planers, swing saws, and boring machines; it also introduced new machines: a double-spindle shaper, a planer and matcher, a boring machine, an 18-inch planer and a 24-inch planer.

The blades for Crescent band saws were made in the plant of the best grade of steel available and their catalog devoted one page to directions on how to braze band saw blades.

That year this company was making a 38-inch, 36-inch, 32-inch, 26-inch, and 20-inch band saw. The main frames of these band saws were cast in one piece, a cored-out hollow, rectangular section. The foot portion was arched in the middle to make the machine set firmly on a floor that might be slightly uneven. With this feature there was no tendency of the machine to rock, as would be the case with a continuous base.

The upper bearing arrangement of any band saw is a vital part of the machine; upon it hangs the weight of the upper wheel plus the tension of the saw blade. This 1908 catalog related: "The wheel on the Crescent band saw can be inclined backward or forward or raised and lowered while the saw is in motion. The end of the tilt-wrench extends downward so as to be in easy reach of the operator, while standing in front of the machine."

"The pivoting point is very close to the center of the wheel so that the tension of the wheel is not changed when the wheel is being tilted. The pivot bracket is fastened to the sliding head by means of two machine bolts, passing through slotted holes. When these are released it is an easy matter to give the upper wheel sidewise alignment with the lower wheel -

sometimes called cross-line adjustment. Having this arrangement on the upper head permits us to bolt the lower bearing solidly to the frame; then the permanent alignment of the lower wheel with the frame never needs to be disturbed. Once the machine is properly set, it will always keep proper belt-travel on the pulleys. A spring near the back end of the upper shaft holds the bearing in the proper position, thus preventing back-lash to the upper wheel in case the saw should break."

"The head that slides on the upright standard is provided with a steel gib, which is adjustable for wear. The standard upon which the head slides is bolted to the arm portion of the frame on the machined surfaces so that necessary repairs may be easily made. The stand-ard stands edgewise to the strain, not flatwise."

"The tension-spring, which is telescoped over the raising-screw, is located inside the frame where it does not show in cut. A spring tension is better than a weight-tension as it can act quicker, being free and there are no loose weights to get lost."

"The upper wheel is fastened to the shaft and the shaft revolves in a long split babbitted bearing; the two members of the bearing have liners between them and are readily adjustable for wear. The upper shaft arrangement used on the Crescent Band Saws is patented."

"The belt shifter is arranged with the handle under the sub-table where it is easy for the operator to reach from the front of the machine."

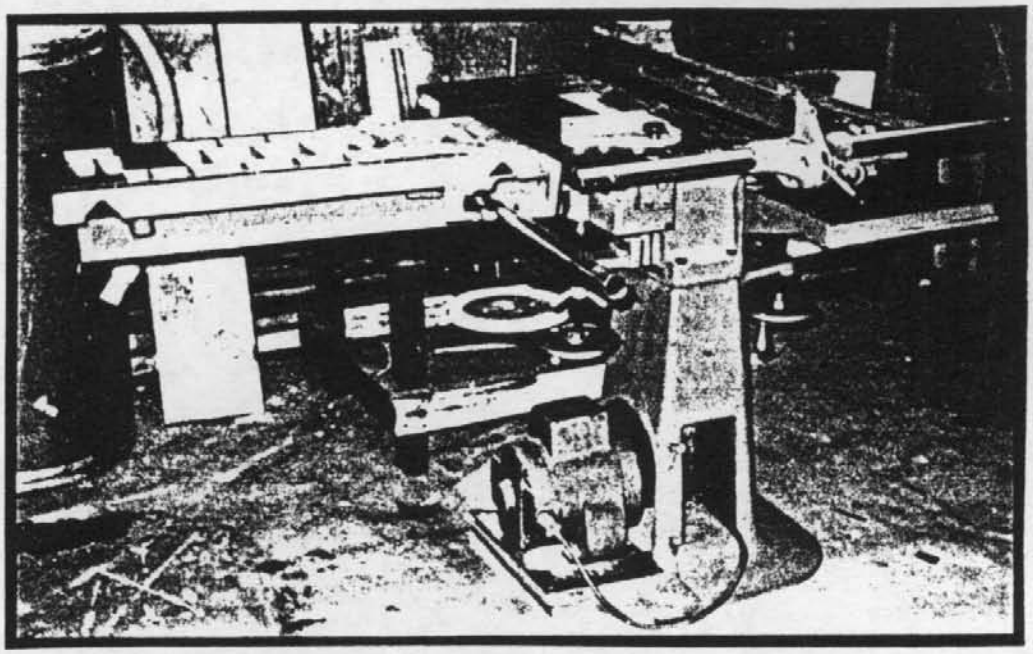
"The lower shaft runs in a long bearing that is bolted rigidly to the frame of the machine. It is properly aligned with the frame at the factory and never needs to be adjusted. It has split babbitted bearings with liners, adjustable for wear."

"The end of the shaft where the loose pulley is located is bored out hollow to form an oil chamber and is plugged with an oil screw having a small hole to receive the oil. Several small holes are drilled through the diameter of the shaft, through the oil chambers, to feed the oil to the bearing of the loose pulley."

(To be continued and concluded next issue.)

know, everything is present except the table saw insert and fence. Somewhere along the line since 1928(?) someone had put a separate modern style motor on the base to drive the table saw but except for that it is in original condition.

"I am pleased to know there are others interested in old tools for their beauty and place they fulfilled in our past."



From Shannon Gomes (RR 3, Waverly, IA 50677): "I have become intrigued by multipurpose wood-working machines. The only 'modern' universal machines seem to be made in Europe.

"The Universal wood-working machine appears to have been the father of the universal woodworker. I myself, have put together an old, what I believe, Simplicity woodworking machine. It originally came from Chicago. I have not been able to locate any literature on this machine. Can anyone help?

"You note in the above picture that I have modified it by putting a Rockwell sliding table and uni-fence. The table tilts and has a 6" jointer and horizontal boring arbor. The entire rig is cast iron (600+ lbs)."

Carter Sio, Woodworking Director, George School, Newtown, PA 18940 writes that he has a Crescent band saw, table saw, and jointer in his shop but is about to replace all three. "They are in good working order but not up to date for our program." (215) 968-3811.

J. C. Hoelle (2231 Charlotte Ave., Ft. Wayne, IN 46805 still needs that information asked for in issue #3, pg. 11 for a Walker Turner jointer and band saw. This is Walker's "Driver Line" of tools.

"Collecting vintage tools is catching me, but bad. I just acquired most parts for a Goodell Waters band saw with wheels about 36" dia. Does anyone have any info on this machine?"

From Hubert A. Loeffler, Sr. (30 Park Place, Saratoga Springs, NY 12866): "I noticed in the newsletter that many have problems obtaining missing parts. I think I can help those who have to make new replacement parts.

"If anyone can provide me with a drawing with dimension, I can supply a wood pattern. With a wood pattern, one could have a casting made and have it machined. The most ideal condition would be to locate an existing part, but that may not be possible. In some locations there are jobbing foundries and machine shops that could provide this service.

"I own a Sidney Wood-Worker in good condition but haven't figured out how to rig the belting. I also have one bad Babbitt bearing on the tenant shaft. Otherwise it is 95% complete. I bought this machine primarily for the 26" band saw. I was advised years ago to remove the band saw section and junk the rest. Am I glad I never did that!

"I never had a great deal of time to work with this machine because I was busy working. I was a wood pattern maker for 36 years at the General Electric Co in Schenectady, NY. They had one of the largest foundries in the country. The last 10 years I managed the pattern shop. My life has given me a lot of experience with wood and woodworking machines.

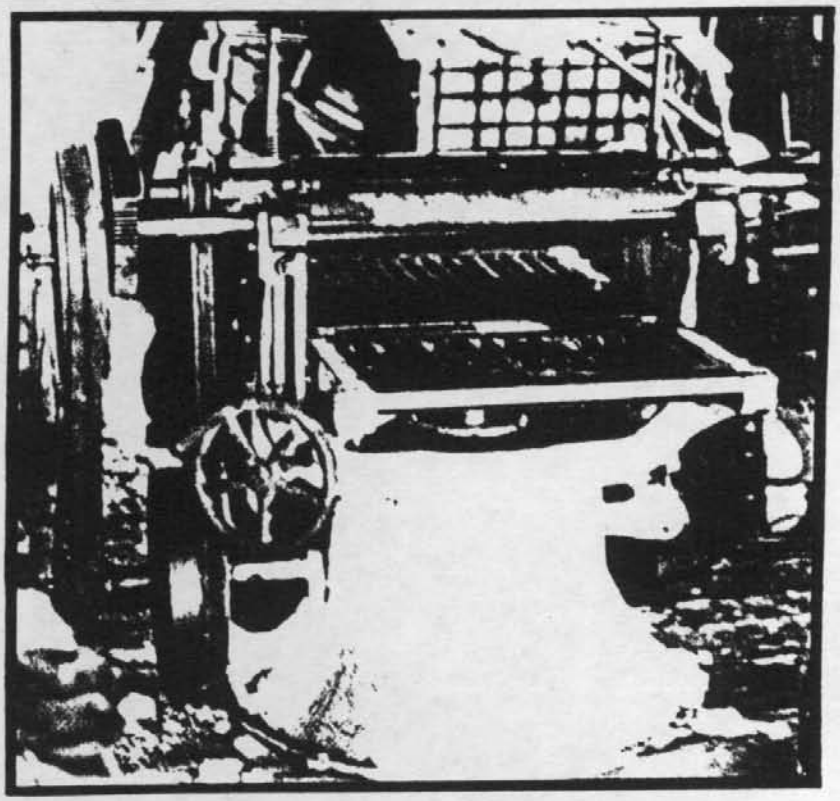
"I am interested in buying a large 36" band saw, a 24" disc sander and a spindle sander."

From Jim Hendrie (POB 358, Venus, FL 33960): "My family ran a large dairy operation in Miami from 1900 until the 1960s where a universal woodworker worked daily. I don't know what year it was purchased - in the 1920s or '30s. With housing, milk routes, milking and a bottling plant plus an ice cream and ice business, the business was completely self-contained. We had carpenters, a tin smith, a blacksmith, mechanics, and an engineer.

"From 1955 until about 1968, the unit was used

more sparingly since we sold our distribution business and only milked cows. Also, good craftsmen were getting harder to find. From about 1968 on the unit was put under an open shed and not used again.

"Everything looks pretty good except the finer points of the band saw. The band saw guard is home-made and needs rebuilding. The guides are in bad shape but the rest of the unit is seemingly in good shape, even the clutches and pulleys. I'll need to know a lot about the unit to get it in first class condition - bearings, belts, proper drive power, etc. But I'm having a real good time with it."



From Dana Martin Batory (402 E. Bucyrus St., Crestline OH 44827): "This past February I went halves on a 24' by 8" two-speed planer with a two-knife square head. Though probably over 90 years old, it's in excellent condition and the owner had already done a good deal of restoration work - new Babbitt bearings, newly machined feed rolls, etc.

"However, it doesn't have a name on it and is of a very peculiar design as you can see by the photo above. Can anyone put a name to it? I'm theorizing it may be an old S. A. Woods or Yates-American.

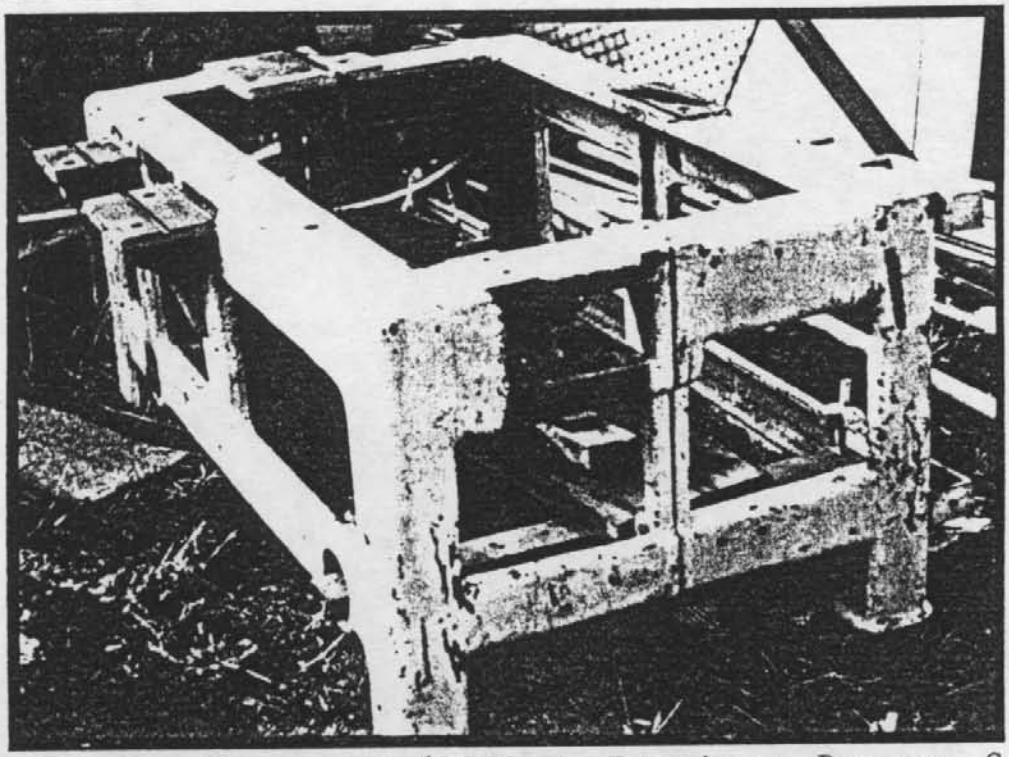
"My partner and I figure we can get our money back by planing lumber. It's as large as any in the

area and the mills here either won't do milling or refuse to touch used lumber."

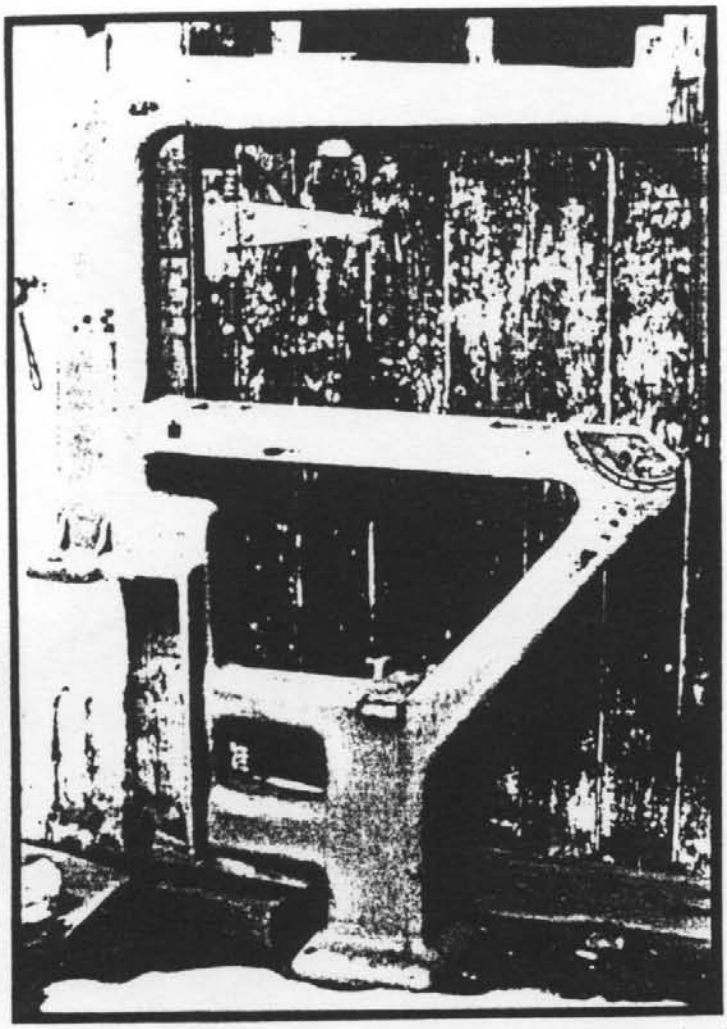
(Dana's phone is 419-683-2817.)

From John Bellingham (336 N. Fairview, Lansing, MI 48912): "I'm glad to hear that there are others out there who have hulked around Crescent's Universal Wood-Worker. I've been using mine for eleven years after salvaging it and doing some basics. I'm sure there's lots more I could learn and do, however, if I knew more."

From Myron W. Curtis (2860 Banks Lane, Va. Beach, VA 23456): "I have for sale a Crescent Universal Wood-Working machine of c.a. 1908 vintage. It is complete with all guards as originally equipped. It includes 12" jointer, 32" band saw, 1" spindle shaper, 14" (orig.?) table saw, and a grinding rig for 12" jointer blades, the original 7½ 3-phase motor and switch box, leather belts, band saw brazing jig, some shaper cutters, saw blades and jointer blades. All Babbitt bearings and independent clutches for each machine. Has had very little use and is in excellent working condition (needs cleaning). Price $2,500. Phone: 804-426-5150.



From Stanley Davenport (1500 S. Broadway, Denver, Co 80210): "I recently acquired a Universal Woodworker.



However, I don't know who the manufacturer was. There are no markings on it except on the bandsaw blade guide (BT&B) which was made by someone else I'm sure. The photo of the band saw frame and the base photo on the preceeding page give you an idea of how the machine looks. (The rest of the parts are in storage.)

"The machine has a band saw, tablesaw, jointer, and a shaper. It is missing the horizontal boring attachment.

"I would like to have any information on my machine - expecially a picture of the pulley and belt system and where I might locate a horizontal boring attachment."

If all this had been thought out in the beginning it wouldn't seem that we'd need another name change already. But "Antique Power Tool Association" could include all old power tools while we are primarily interested in woodworking power tools. So, how about "Antique Woodworking Power Tool Association"? It's longer but specifies more clearly what we are all about.

I'll schedule the next issue for August. I have the second half of Grace Allison's article and another piece from Dana Martin Batory but to fill out the newsletter, I'll need to hear from you. Don't keep us in the dark. Did you buy or sell that machine you wrote about earlier? Have you any tips you discovered in restoration? Any questions come up - problems, etc? Write: Bill Mueller, Rt. 1, Box 262, Middlebourne, WV 26149.