

# SHOPSMITH SHAVINGS



## Magna Engineering Corporation

Manufacturers of Shopsmith • Menlo Park, California • Phone: DAvenport 3-3191

Dear SHOPSMITH Owner:

We're expecting!

As a very important member of the SHOPSMITH family, we want you to be the first to know the good news. The exciting addition to the family is a brand-new SHOPSMITH to be announced to the public near the end of March.

Three years of intensive market analysis...design...testing...redesign... and tooling were required to produce a product we considered worthy to succeed the original SHOPSMITH. And we recognize that you played an important part in the program which led to the development of the new SHOPSMITH.

First, it was your initial reception of the revolutionary design, your confidence, that established SHOPSMITH as leader of the power tool industry.

Second, your suggestions for additions and changes helped to direct our re-engineering efforts.

Third, your overwhelming endorsement of SHOPSMITH spurred us to extend even further the basic SHOPSMITH principle.

The new SHOPSMITH is a completely integrated tool, with all required components factory assembled, factory tested. Much as 1954 V-8 automobile engines, it has power to spare. Its lines are as modern and functional as the swept-back wings of a jet plane. It's as easy to obtain the correct speed as to dial the telephone. And it incorporates safety features far beyond industry standards.

It's easy to see why we are excited and proud of the new SHOPSMITH. But we want you to know that the glamor of this new arrival will in no way reduce our interest in owners of the original model, or our sense of responsibility for their continued satisfaction.

The new SHOPSMITH is SHOPSMITH Mark 5. Look for it soon at your favorite store.

Yours truly,

MAGNA ENGINEERING CORPORATION

*Robert L. Chambers*  
President

Robert L. Chambers

Plants Located at Berkeley and Cleveland

## News About The New 4" Jointer

Since the announcement that Magna Engineering Corporation had produced a new precision jointer as a SHOPSMITH accessory, many owners have written in to ask about the use of a jointer in the shop.

The jointer is usually considered a companion to the table saw. The ideal setup is a mounting arrangement that permits the saw and jointer to run simultaneously. The new jointer was so designed.

Basically, it is a rotary, mechanical planer that produces smooth, square edges with little effort, and none of the frustrating attention a hand plane requires. Normal shop procedure with a saw-jointer combination is this. Stock that must be ripped is first jointed smooth and square on one edge. When ripping, the jointed edge is held against the rip fence. The blade to fence setting is adjusted  $1/16"$  oversize to allow for the

material that will be removed on the second jointing cut. After the second jointing cut, the work is ready for gluing or assembling without further attention.

This, of course, is but one of the uses for the jointer. The more you have it in the shop, the more you realize how many woodworking operations it does easily and accurately. For example; with it you can cut rabbets, do light surfacing operations, form tapers and accomplish recessing cuts.

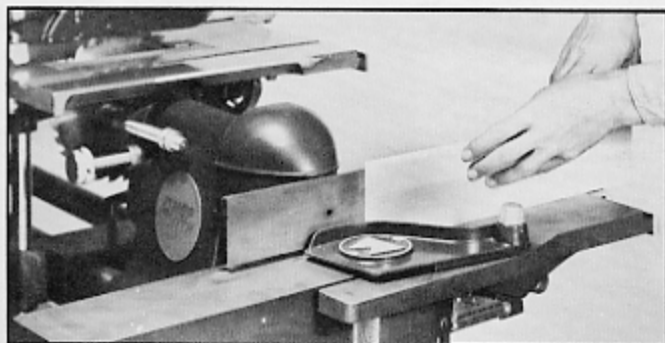
The Magna 4" Jointer is a wise addition to the shop, not only for the operations it performs, but because it makes these jobs easier and more accurate, and because its design is such that it requires a minimum of maintenance and very little skill to make necessary adjustments. For example, there is an easily read depth-of-cut scale so that settings do not have to be measured.

Adjustable auto-stops on the fence afford automatic settings at the most used angular positions without any attention beyond the initial accuracy check. Adjustment of knives in the cutter head, ordinarily a time-consuming procedure, is reduced to fundamental requirements on the Magna Jointer. All you do is raise the knives with an Allen wrench to match the height of the fixed outfeed table. The knives themselves have an exclusive safety taper. The cutter head guard has an enclosed tensioning device, and may be used on the outfeed table to cover the exposed cutter head when rabbeting.

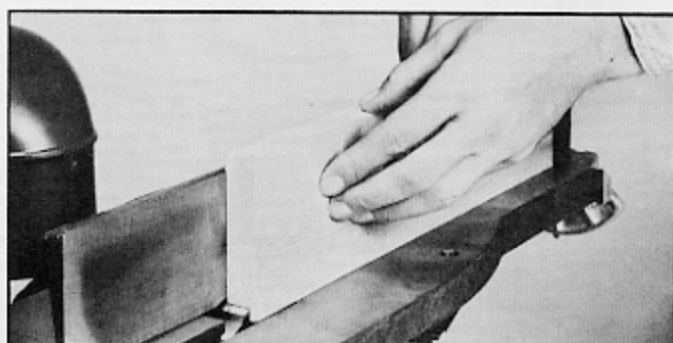
Of course, the MAGNA Jointer fits easily on SHOPSMITH. Once mounted, it may be swung down out of the way when SHOPSMITH is raised to vertical position. Loosening one cap screw is the only chore when it is necessary to remove the jointer entirely.

**Illustrations Are From 8-Page Jointer Owner's Guide Which Provides Operational Procedures As Well As Setup And Maintenance Information**

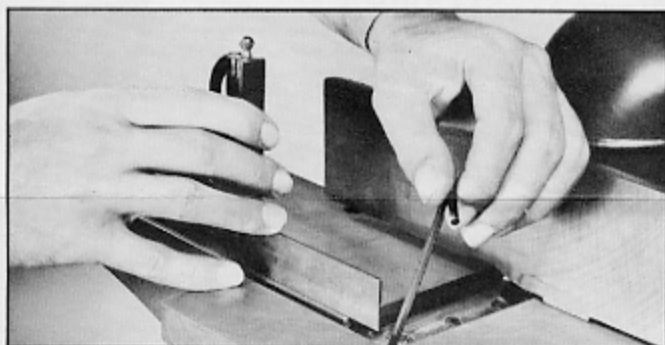
### MAGNA 4" JOINTER



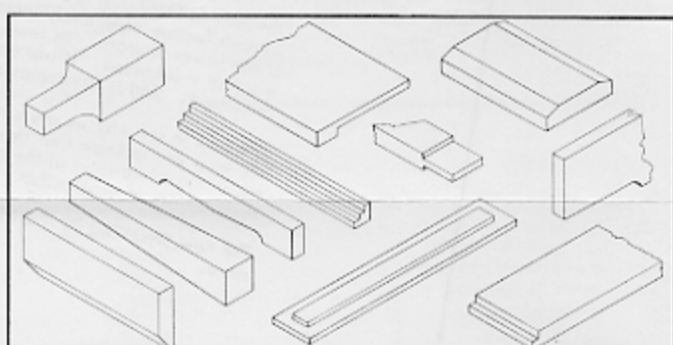
### Rabbeting



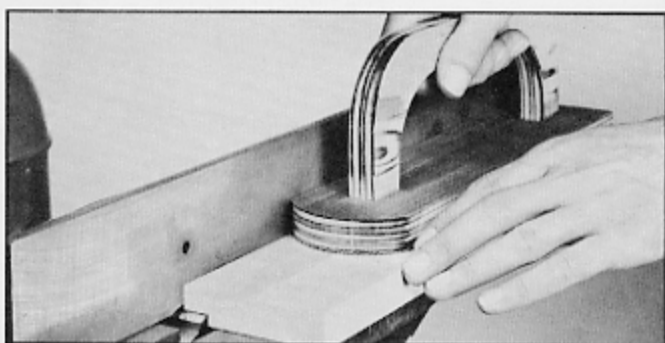
### Adjusting Knives



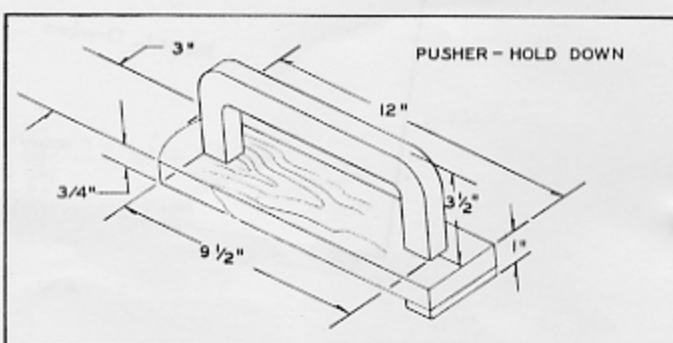
### Typical Jointer Cuts



### Pusher-Hold Down In Use

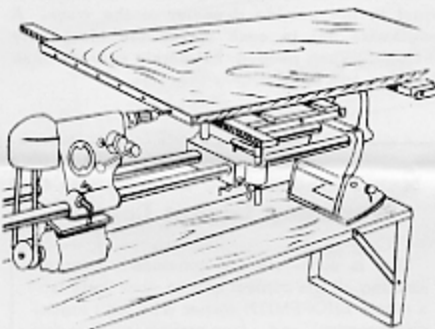


### Construction Details



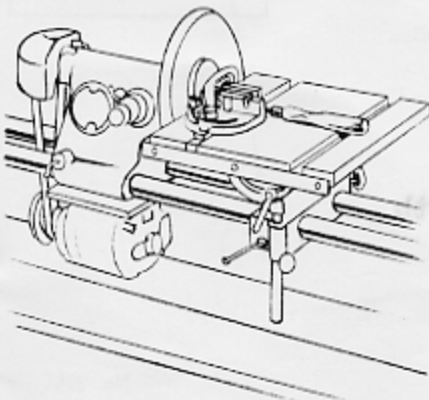
## Drilling Extremely Large Work

Fred F. Bubach of Litchville, North Dakota, submits a method for drilling accurate holes in the edge of an exceptionally large piece of work. Fred explains: "Clamp a strip of straight hardwood to the underside of the material which is to be drilled. Move the table back from the drill and let the hardwood strip on the underside come up against the table, thus holding it in place perfectly square to the drill. The extension table is used, of course, to supply additional support." Fred goes on to say, "Only on SHOPSMITH is an application of this nature possible."



## Precision Face Plate Work

Everyone knows that the relationship of SHOPSMITH components permits exclusive and practical setups that often provide the solution to knotty problems. Many times, as in this instance, a setup is created that adds precision or convenience to some standard operation. The suggestion, which comes from A. F. Hardt of Pekin, Illinois, is to utilize the SHOPSMITH table and miter gauge to cut precise surfaces on face plate turnings. Table height is adjusted so that the point of the cutting tool is slightly above the center line of the work piece. The tool must be firmly clamped to the miter gauge and the pass made very slowly. This idea can be extended a bit further when one considers that the miter gauge will swing in an arc. This would involve clamping the miter gauge to make the cut. Depth of cut should not be too great. It is better to achieve full depth with successive passes. The round nose is a good lathe chisel for stock removal. The skew is good for finishing.



## SHOPSMITH Scores With Do-It-Yourself Aluminum

MAGNA'S Test Lab, which endeavors to keep pace with all new materials, reports that the new DO-IT-YOURSELF ALUMINUM (REYNOLDS METALS CO.) can be worked on SHOPSMITH as easily as wood. Some simple rules should be followed.

When sawing sheets it is good practice to sandwich the material between scrap plywood or to situate a board over the saw blade (blade projects through it) so that the sheet can just pass between the table and the board. This will prevent the saw teeth from bending the metal as it cuts. The Abrasive Cut-Off Wheel does a good job without special setups but observe standard safe practice procedures—feed slowly, do not exert side pressure, and wear Safety Goggles.

When jointing, the edge of the sheet should be clamped between boards much as you would handle sheets of veneer. Another method is to hold the sheet against the fence with a board as the pass is made. The knives cut both the board and the sheet. Keep cuts light and feed slowly.

Sandwiching the sheet between boards prevents jagged edges when jig-sawing. An alternative is to make a special wood insert with a hole just large enough to let the blade pass through. This will give the aluminum maximum support around the cutting area and keep it from bending.

When drilling, clamp the work to the table. A lubricant may be used but is not necessary.

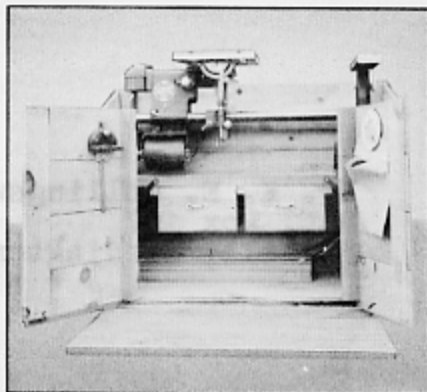
DO-IT-YOURSELF ALUMINUM may be sanded, buffed, polished, or decorated with such techniques as spot polishing and surface abrading.

Wear Safety Goggles on all operations; feed slowly and take light cuts.

## Which Comes First - SHOPSMITH Or The House?

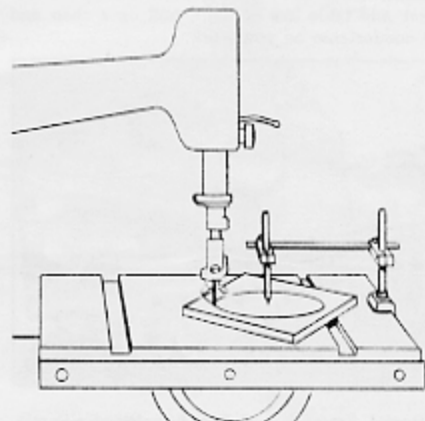
Most people think about buying SHOPSMITH when their home is complete, but Mrs. Russell Vogt, Holyoke, Mass., considers that buying SHOPSMITH before the home is even built is a better idea. Obviously the thought is well taken, for with SHOPSMITH you can actually build a house, which is exactly what Mrs. Vogt has done. While the house was under construction, SHOPSMITH was kept in the ingenious case shown in the photograph. The box is heavily built and has a hinged top that locks the two front doors.

"It is theft proof and weather proof when closed," says Mrs. Vogt, and, we may add, a wonderful ideal!



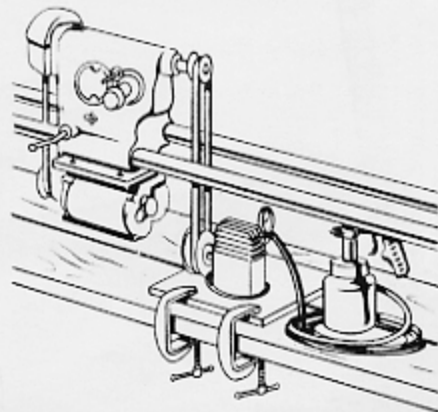
## Universal Hold Down Is REALLY Universal

Heyward Peck, after some very flattering comments on the new Universal Hold Down, goes on to make a sound suggestion that will further extend its usefulness. Actually, the idea is but one example justifying the thought that a hold down should be a flexible accessory having many applications. Mr. Peck's idea is this. Needing a pivot jig for circular cutting on the jigsaw, he devised one by assembling some of the Universal Hold Down components as follows: He locked the table clamp to the table and attached the threaded post. With a 90 degree joint he added the hold down rod to the threaded post. A second 90 degree joint secured the fence post parallel to the threaded post. He used a machine screw with a thread that matched the tapped hole in the fence post, cut off the head and ground the opposite end to a point. The setup makes a very practical pivoting jig arrangement. For larger diameters, the table clamp can be used on the extension table. Incidentally, why can't this same arrangement be used for pivot sanding circular work?



## SHOPSMITH Drives Paint Sprayer

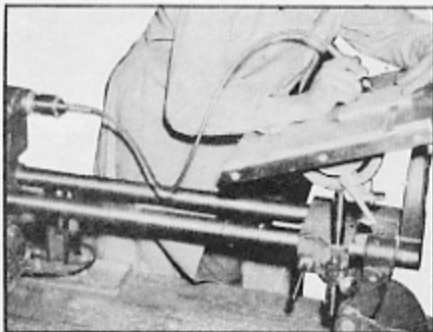
Douglas Ladd of Syracuse, New York, comments that SHOPSMITH can do everything but paint for him, then disputes his own statement by going on to tell us of how he uses SHOPSMITH to run a small compressor. He locks a pulley on the spindle and then clamps or otherwise secures the compressor to the bench boards so that it is in alignment with the pulley on the spindle. A V-belt transmits power to the compressor.





# Shop Chips and Chats

The heavy duty flexible shaft which is available as a SHOPSMITH accessory is not the only flex shaft that can be used on SHOPSMITH, and from Vernon Young, shop instructor at Columbus High School, comes a suggestion that further emphasizes SHOPSMITH'S flexibility. Mr. Young uses a flexible shaft for engraving purposes and, as can be seen in the photo, utilizes SHOPSMITH as a work table for this purpose. An excellent idea Mr. Young, but we think we can go you one further. Why not use the same setup with SHOPSMITH in a vertical position, then with the table tilted, the rip fence may be used as a ledge against which the work may rest. With the headstock and table low enough, pull up a chair and be comfortable as you work.



Daniel Scott, Jr., of Los Angeles, California, who has done some interesting work with the Magna Dado, submits a suggestion concerning the small curve in the bottom of the cut which becomes evident in dados exceeding  $\frac{1}{2}$ ". "I have found it much better to curve the piece of wood you are inserting into the dado rather than try and cut the dado out with a chisel. It just takes a

small amount of sanding and makes a much better fit." We think the idea is worthy of mention for some applications where an exposed dado is not critical. For stop dadoing where it is important that the cut be hidden, it is still necessary to use a chisel to cut out the curve that is left by any dado blade.

SHOPSMITH owners who are also interested in leathercraft will find this idea sent in by A. F. Johnson of Glenwood Springs, Colorado, very useful. Mr. Johnson tells us, "In decorative leather work it is often necessary to make a row of holes around the edge of the project for lacing. This is slow, tedious work with mallet and stitching punch, but is easily done with SHOPSMITH. Place SHOPSMITH in vertical drill press position, chuck in the stitching punch, and, with motor idle, use machine as a press punch."

Having done some leather work, we can see the time and effort saving value of Mr. Johnson's idea. As in woodworking, the SHOPSMITH rip fence is the ideal guide for a series of parallel holes.

Paul Huefner of Salt Lake City, Utah, is quite happy with his method of putting new sandpaper on the disc. He pulls the old sandpaper off and then, with a new sheet of sandpaper over the old Distic, he irons it on with a medium hot electric iron. This heats the Distic enough to hold the sandpaper. To protect the iron he places a piece of cloth over the sandpaper. "It works fine," says Paul. "I have used about four sheets of sandpaper on my last Distic application."

Incidentally, the proper way to store the sanding disc is sandpaper side down on a level shelf. It would even help to put a weight on it while the disc is in storage.

Another hint for painters, this time from Webb E. Smith of Detroit, Michigan. Mr. Smith tells us, "SHOPSMITH will give you a clean and dry paint roller in less than one minute," and then lists the following instructions: "Remove the handle and mount the paint roller between lathe centers.

It is very important that the tubular ways be completely covered with paper and that a paper hood be set over the work to catch the materials thrown off by the roller. Turn on the motor and in almost less time than it takes to tell about it, it will be free of paint. Dip the roller in turpentine and repeat the above procedure. As a result, the paint roller is clean and dry. This," concludes Mr. Smith, "is particularly time saving when you wish to change colors in the middle of a paint job."

Protecting the tubular ways from grit and dirt, especially during any abrading operation, is a problem neatly solved by Liem Tiong Hian of Djakarta, Indonesia, in the following manner. He keeps on hand several pieces of flexible rubber hose similar to the type used for radiator pipes in automobiles and having an inside diameter equal to the outside diameter of the ways. A lengthwise slit in each makes the idea fairly obvious. When needed, he merely spreads open the hose and slips it over the tube.

## News About The SHOPSMITH Workshop Layout Contest

This is sure—we are convinced, after examining all the contest entries, that there isn't a single SHOPSMITH owner who isn't ingenious, practical, and a true craftsman. This conclusion is very flattering to us, but being a fact, did not make deciding the contest winners an easy job. But the six winners have at last been chosen. Here they are:

- 1st prize.....C. Sutherland, Hyattsville, Md.
- 2nd prize.....C. T. Surridge, Oakland, Calif.
- 3rd prize.....D. Cuerton, Arcadia, Calif.
- 4th prize.....Jorgen Bjerre-Peterson, Denmark
- 5th prize.....W. B. Welch, Tullahoma, Tenn.
- 6th prize.....Elmer E. Harris, Glenshaw, Pa.

Our thanks go to all owners who submitted an entry. We are sorry we could not give a prize to each, but we would like to state once more that the general excellence of the entries made picking the winners a very, very difficult job. Future issues of SHOPSMITH Shavings will contain more details of the winning entries.



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