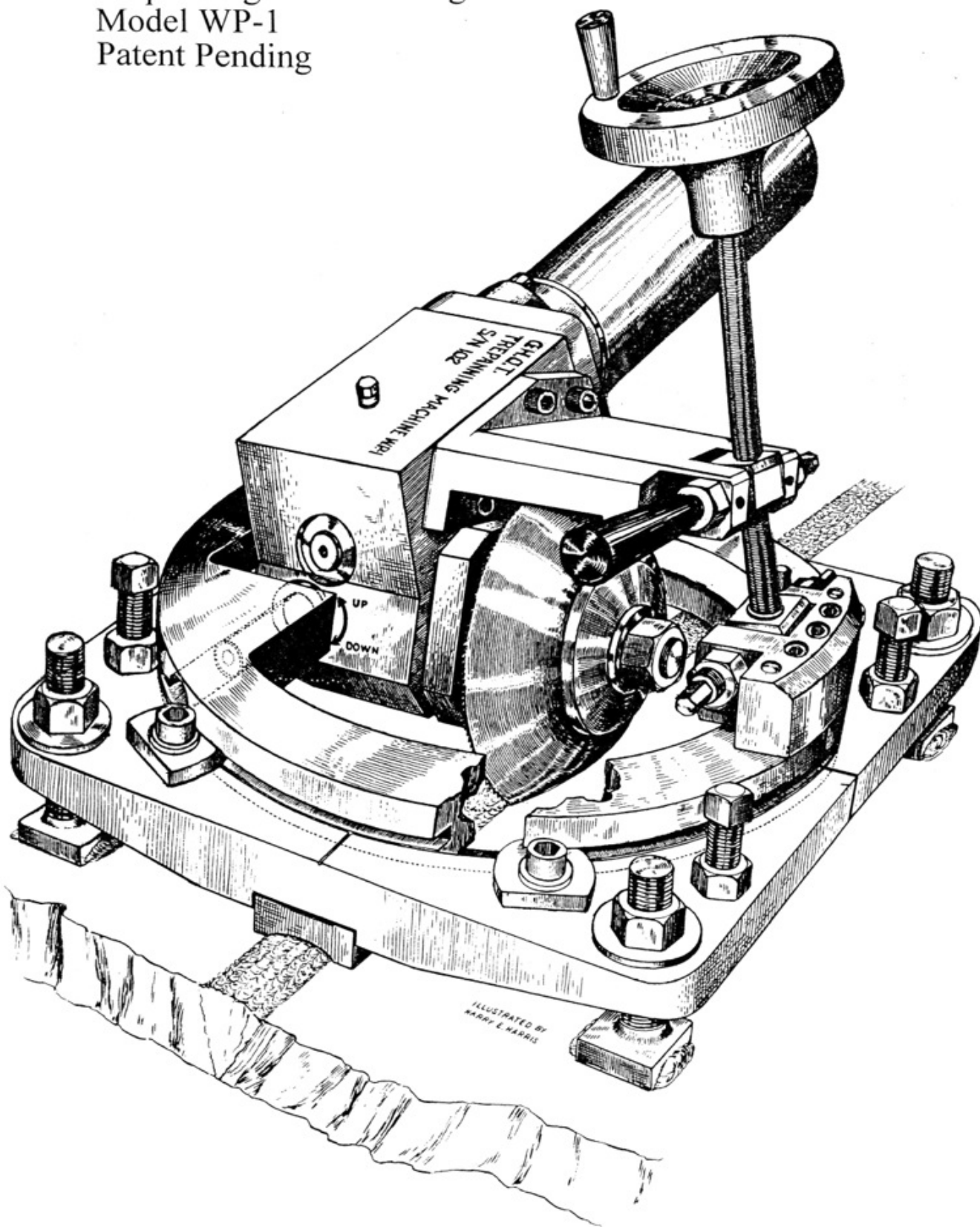


Grimsley's Portable
Trepanning Metal Cutting Machine
Model WP-1
Patent Pending



GRIMSLEY'S HOUSE OF TOOLS, INC.
Specializing in Portable Tools

**Grimsley's Portable Trepanning
Model WP-1
Metal Cutting Machine**

Description

Grimsley's Portable Trepanning Machine is especially useful in taking specimen samples from hull plates, welded joints, casting and other metal structures requiring the removal intact of a metal core specimen for test or analysis.

The Trepan Machine is a precision machine made for close tolerance work and can make repeat cuts in various sizes.

The machine is powered by an air motor, thereby eliminating the chance of electric shock and down time experienced with electric motors.

The Trepan machine uses a curved blade made especially for cutting longitudinal, transverse, and oblique specimen required by standard practice.

Grimsley's Trepanning Machine is equipped with a 3/4 horsepower motor with left hand rotation.

Operation

To operate successfully, keep a slight pressure on the blade while cutting. The horse power of the motor and the fragility of the blade complement each other; i.e., too much pressure on the feed screw will stall the blade without stripping the saw teeth, and it takes a very little pressure release and the saw blade continues to cut.

The removal of the specimen is effected by two identical, opposite cutting operations.

Four 3/4 - 10 x 3" long bolts are first tack welded to material being cut, using a template to locate the exact position for tack welding the holding studs.

NOTE: Make sure the tack-welding on studs is sufficient to hold machine in place, especially if the machine is being used in an overhead position.

The cutting operation is accomplished by turning the handle on the feed screw (left hand operation) while gently using the feel of back pressure to determine the rate of

cutting pressure to apply to the blade. This type of feed requires continuous turning of the hand wheel by the operator. The time involved in making a cut is controlled by the operator. The more adept and the greater the sensitivity in the hands of the operator, the faster the cut.

Sequence of Operation

1. Locate position where cut is to be made.
2. After location is determined, use the template furnished with the machine (AA-71) to find the exact location of the cut to be made, also the position of the square head bolts (AA-3) for tack welding. The template (AA-71) will hold the bolts in the proper position for welding, assuring that the machine will fit over the bolts after they are tack welded.
3. The template (AA-71) is removed from the tack-welded bolts.
4. With the proper feet attached to the base plate, (AA-2-1, -2, -3, -4, -5, -6,...) the thickness of the feed is determined by the size and depth of the sample over the four tack welded studs (AA-3) and adjust the jack screws (AA-5) before tightening the hold down nuts on the tack welded bolts.
5. Install the machine on the base (AA-1). Machine will fit in recess of base (AA-1). Turn the hold down clamp washers (AA-4) for clearance to allow installation and turn them back into the groove to tighten before starting the final cut.
6. Feed the blade down with the blade turning until it makes a mark where the cut will be made.
7. Loosen the socket head screws (AA-33) just enough to allow turning of the machine 180 degrees. Tighten the socket head screw (AA-33) to secure the machine. Feed the blade in until the surface of the material being cut shows where the next cut will be located. Measure the distance between the two marks to insure the width of cut is correct.
8. If the width is correct, start the cut and cut to the desired depth which will be completed when the machine contacts the adjusted hex rest button (AA-40).
9. Do not loosen the hold down nuts until the specimen has been cut.

10. Once job is complete and machine is removed, all metal to include saw blade should be wiped clean. A light coat of lubricant should be applied to all surfaces to include the saw blade.

Maintenance

Equipment should be thoroughly cleaned after each use, sprayed with water displacing rust inhibiting chemical before storing in storage case. If machine is to be used in a contamination area, clean in accordance with Government specifications.

GRIMSLEY'S HOUSE OF TOOLS, INCORPORATED WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY IMPROPER USE OR STORAGE OF THEIR EQUIPMENT.

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CALL FOR DEMONSTRATION OR SERVICE

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GRIMSLEY'S HOUSE OF TOOLS, INCORPORATED
POST OFFICE BOX 699
PORTSMOUTH, VIRGINIA 23705-0699
TELEPHONE: (757) 399-4438
FAX: (757) 399-0642
E-Mail: sales@grimsleystools.com

VISIT OUR WEB PAGE
www.GrimsleysTools.com