



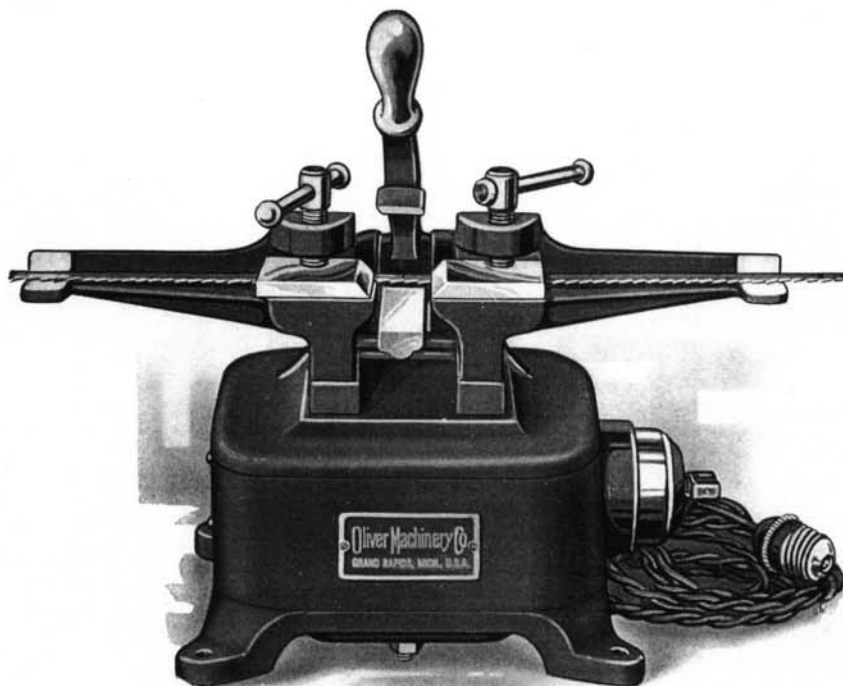
*"Every User
Is a Booster"*

"Oliver" No. 462 Vulkan Electric Brazier

for Band Saw Blades

Economical, Invaluable and Indispensable

Large
Companies
with
branch
plants
have
purchased
from
2 to 8
Brazers



Used and
recommended
by 75
Band Saw
Manufacturers and
thousands of
Band Saw
Operators

"OLIVER" NO. 462 VULKAN ELECTRIC BRAZIER—Ready for use with Cord and Plug for Light Socket Attachment. Equipped with Snap Switch for 2 or 3 Phase Power Lines.

CAPACITY—The No. 462 Brazier will braze band saw blades 19 gauge or thinner, in widths up to 1½ inches wide.

The "Oliver" Vulkan Electric Brazier utilizes the electric heat of resistance for melting down the soldering metal. No open flame, no danger of fire, no combustion and no formation of scale on the saw blade can take place, the conduction of heat allowing a sensitive control.

The "Oliver" Vulkan Electric Brazier is regularly furnished for single phase, 60 cycle, 110 or 220 volt Alternating current as specified. A 60 cycle brazer will work on 30, 40 or 50 cycles. For other cycles and voltages the brazer must be specially wound. For two or three phase power lines, special wiring from switch to power line is essential. (Not made for direct current.)

automatic knife grinders. These brazers need no preparation, are always ready for work and cause only insignificant consumption of current because the brazing process lasts only a few seconds and more than 100 brazings can be effected by one Kilowatt-hour.

The "Oliver" Vulkan Electric Brazier needs no specially skilled workman. It is so well insulated and the voltage at point of action is so low that no shock can be given to operator and if too much current is turned on, the saw will melt at point of brazing and break the electric circuit, so no damage can possibly be done. Explicit directions for use supplied with each brazer.

Complete Service

We can furnish everything for saw and knife fitting purposes—automatic filers, sharpeners and setters for band and circular saws. Also

Manufactured by

Oliver Machinery Co.

Grand Rapids, Mich., U. S. A.

BRANCH SALES OFFICES:

New York, St. Louis, Minneapolis, Los Angeles, San Francisco, Chicago, Denver, Salt Lake City, Seattle, Manchester, Eng.

Operation

There is no other brazing apparatus on the market that can be compared with the Vulkan as regards capacity, simplicity of manipulation, excellent quality of brazed joints and economical working. The top part or bed consists of a back rail, clamping plates and clamps accurately fitted to hold the saw and maintain the back of saw in perfect alignment. The electrical element comprises a transformer, the main coil of which is connected to a power or light current plant by means of a switch, and the secondary coil of which serves as a stay for both saw ends. Give a bevelled shape to the saw ends to be brazed by filing them off up to about the width of the saw blade and overlap them about $\frac{1}{3}$ to $\frac{1}{2}$ inch. Then lay a strip of $\frac{1}{2}$ to $\frac{3}{4}$ inch Silver Solder between them and start the apparatus by turning the switch. After some seconds the brazed seam will glow and melt down the brazing metal. Besides the zero position, the switch has three further steps. By every step, certain windings of the secondary coil are switched on and off, thus causing a stronger or less heat. The switch can be regulated both backward and forward, thus permitting or regulating

the heat conduction during the melting period. During the brazing process, distribute the brazing metal on both sides by means of a borax flux so as to obtain a tight connection and a clean brazed seam without any scale.

Automatic Tempering

By means of the hawkbill or hand lever clamping device, both ends to be brazed should be firmly pressed together for some seconds after the brazing metal has been melted, but this should only be done immediately after the current has been switched off. Do not fear any annealing of the saw blade. Due to the clamping device any desired cooling down of the brazed seam can be obtained. Too great hardness of the steel is equalized by again switching on the electric current. All this tempering process is in full sight of the operator, who can judge the proper temper by the color test.

Better Brazing

It is a recognized fact that a long heating period causes alterations in the texture of the steel, owing to the air entering the brazed seams and to oxidations, thus highly deteriorating its tensile strength. But when the braz-

ing process can be effected within a few seconds, the brazing effect will be quite faultless so that no further breakage of the saw blade near or within the brazed seam is to be feared.

Easy to Use

The brazing process can be easily supervised by the workmen, no flames or dangerous temperatures are produced and damage to the apparatus by wrong attendance is quite excluded. Last, but not least, no skilled man is necessary owing to the simple design and construction, but an unskilled man can operate this brazer and get good results.

Current Consumption

The electric brazing apparatus needs 6 to 12 amperes for blades up to a width of $1\frac{1}{2}$ inches so that, after the necessary precautionary measures have been taken, it can be connected to every alternating current feeder of the correct voltage for the machine. The current consumption is exceedingly low. More than 100 brazings can be effected by one Kilowatt-hour. Fluctuations of current up to 10 or possibly 20 volts should not seriously affect good results. (Phase, cycles and voltage of current must be specified.)

CODE	NO.	CAPACITY	VOLTS	CYCLES	BOXED	CU. FT.
Devob	462	Up to $1\frac{1}{2}$ in.	Either 110 or 220	60	60 lbs.	$1\frac{1}{2}$

If desired for use on 330, 440 or 550 volt A.C. — slight addition.

For use on 25 cycle current — slight addition.

"Vulkanite" (Stick Borax), per dozen 6" sticks, \$1.20. Efficient and essential.

Silver Solder, $\frac{1}{2}$ " standard width, per ounce, \$1.00. Best quality and essential. Customer is recommended to order Solder and Borax Sticks in connection with Brazer.

Brazers wound for 60 cycle will work on 50, 40 and 30 cycles.

If desired for use on 2 or 3 phase, special wiring from switch to power line required, which must be provided at customer's cost.

These brazers are for use on alternating current only.

Vulcan Brazer Users Are Boosters

The following are excerpts from letters in our files.
Read and see what others think of this wonder brazer.

Concerning our experience with Vulkan Electric Band Saw Brazers, we have purchased two of these machines and our experience with them has been that they are capable of turning out perfectly satisfactory work when properly used. We think they are particularly suited to shops where there is not sufficient brazing to warrant running a fire continuously. (Also used in branches.)

Henry Disston & Sons
R. F. Nalle, Gen'l Factory Mgr.,
Philadelphia, Pa.

We are in receipt of your letter of July 2nd, referring to order P.S. 101, covering the brazing of 150 Band Saws. We received the three sample brazed saws and the one sent us on which the laps have been ground, and wish to say that they certainly look good to us. We are in urgent need for these saws and ask that you kindly braise them and return to us as promptly as possible.

Pittsburgh Erie Saw Co.,
C. H. Jull, Gen'l Mgr.,
Pittsburgh, Pa.

Our greatest success in selling Band Saw Brazers is by our factory representative taking one of the Brazers into the factories and demonstrating to the foreman just what it will do. You will note we have sold quite a number of these and we have had no complaint. We have used one in our store, brazing saws at different times, and are pleased with the results.

Clark Hardware Company,
George B. Pitts,
Jamestown, N. Y.

We have now had your Electric Brazer in constant use for the past five months, having brazed all widths of saws up to and including 1½ inches wide, 19 gauge. Have made as many as 80 brazes per day and have yet to make the first failure.

We specialize in small band saws ½ inch up to 2 inches wide, both for metal and wood. We think the Brazer superior to anything in this line that we have ever seen.

Ralya Saw Company,
W. S. Ralya,
Cincinnati, Ohio.

The Electric Band Saw Brazer has been very satisfactory for our work and we should not want to do without it. Would not want to go back to the old method of brazing our saws.

Crescent Machine Works,
Leetonia, Ohio.

The Electric Band Saw Brazer which we purchased from you about a year ago has been giving entire satisfaction. It is very simple of operation. Our joints hold.

The Belmar Mfg. Company,
Mr. L. W. Marble,
Canton, Pa.

We are using one of your Electric Brazers for small band saws and are pleased to report that it is a first class tool in every respect and fills the uses that it was designed for in every way. We consider this one of the essentials to the band saw filing department.

The Mason Mfg. Company,
E. H. Mosher, Supt.,
South Paris, Maine.

As to the results obtained in the use of an Electric Band Saw Brazer manufactured by you, in referring this matter to the mechanical department they in turn report that the Brazer is in service and works very satisfactorily.

Armstrong Cork Company,
Lancaster, Pa.

In February, 1925, we received one of your No. 462-A Band Saw Brazers, and have used it continuously since that date. We find that this machine is by far the fastest and most satisfactory way of brazing band saws.

We have brazed as many as seven dozen band saws in 3½ hours, which time includes the filing of laps. This, we believe, is something that cannot be done by any other method and obtain perfect brazes.

J. B. Burrill & Son,
Ilion, N. Y.

We are pleased to advise that your Electric Band Saw Brazer has given

perfect satisfaction. We now do our work much quicker than formerly.

Never Split Seat Company,
Evansville, Ind.

We have found Electric Band Saw Brazer practical in every way and if we could not get another would not part with it at any price.

York Saw Works,
York, Pa.

The Electric Band Saw Brazer you sold us is giving good results.

Western Foundry Company,
Chicago, Ill.

We are using a Vulkan Electric Band Saw Brazer on the very narrow saws. The work it does is giving entire satisfaction.

E. C. Atkins & Co., Inc.
W. A. Atkins, V. P.,
Indianapolis, Ind.

The Electric Band Saw Brazer we purchased from you is giving entire satisfaction.

Cleveland Chair Company,
John Milne, Pres.,
Cleveland, Tenn.

We like the Electric Band Saw Brazer and can say that we find same entirely satisfactory and is giving us good service. We would not like to be without the brazer, it is quite a time-saver and we cannot speak anything but favorably for the equipment.

York Body Corporation,
H. D. Keller, Pres.,
York, Pa.

After 16 years' daily use, we recommend the Electric Brazer as the most efficient apparatus for the purpose that we have seen or employed during 48 years' experience in connection with the manufacture of woodworking machinery. We never fail to make a perfect braze.

Oliver Machinery Company,
Grand Rapids, Mich.

OLIVER MACHINERY COMPANY GRAND RAPIDS, MICHIGAN, U.S.A.

"OLIVER" NO. 462 ELECTRIC BRAZER FOR BAND SAW BLADES

The "Oliver" No. 462 Vulkan Electric Band Saw Brazier is recommended for the brazing of both wood and metal cutting band saws and has been extensively marketed to saw manufacturing and repair shops and to plant operators connected with all industries in connection with which band saws are employed. The brazier is alike desirable and

indispensable, whether but one, several, or many band sawing machines are in use. Uniformly satisfactory. Never fails to please. Thousands marketed.

The names of users appended will suggest the character and extent of the sales outlet to all industries.

Board of Education, Detroit (2)
American Brake Company
Armstrong Cork Co.
Barber Colman Co., Rockford
Belmont Casket Mfg. Co.
Bessemer Gas Engine Co.
Brockway Motor Truck Co.
Buckeye Chair Co., Ravenna, O.
Chattanooga Wheelbarrow Co.
Colt's Pat. Fire Arms Mfg. Co.
Decatur Lumber & Mfg. Co.
Struthers Wells Co., Warren, Pa.
Swift & Co., Union Stock Yards (8)
Syracuse Chilled Plow Co., Syracuse
International Harvester Co.
Western Foundry Co., Chicago
Pittsburgh Railways Co.
Missouri Pacific Railway Shops
Muncie Foundry & Machine Co.
National Showcase Co., Columbus
Ohio Brass Co., Mansfield
Packard Motor Car Co.
Penn Steel Castings Co., Chester
Puget Sound Navy Yard
Champion Coated Paper Co.
Rochester Gas & Elec. Corp.
York Body Corporation, Pa.
Beaver Piano Co., York
Rushville Furniture Co.
Tell City Chair Co.
Thomasville Variety Works
Titan Metal Co.
Wilson Body Co.
Carnegie Steel Co. (4)

Connecticut State Hospital
Cerro de Pasco Copper Co., Chile
Fisher Body Corporation
Abernathy Furniture Co.
H. J. Heinz Co.
Omaha Schools
Nordberg Mfg. Co.
Crane Company
United Shoe Machinery Corporation
Bethlehem Steel Co. (6)
The L. & I. J. White Co.
Chicago Pneumatic Tool Co.
Buckeye Incubator Co.
Milwaukee Schools
Houston Schools
Du Pont Engineering Co.
Keeler Brass Co.
Cleveland Armature Works
Long Island Ry.
Doernbecher Mfg. Co., Portland
John B. Ransom Co., Nashville
Gettysburg Furn. Co.
Penn Planing Mill Co.
Schock Parlor Frame Co.
Standard Sanitary Mfg. Co.
Industrial Works, Bay City
Radford Pipe Works, Virginia
State Normal School, Kalamazoo
Air Corps, Wright Field, Ohio
Motor Products Corporation
Furniture Shops, Grand Rapids
Grand Trunk Railway
Harvard Co., Canton, O.
John Widdicombe Co., Grand Rapids

Hammond Lumber Co., Los Angeles
Coshocton Iron Co., Monongahela
American Steel & Wire Co.
Boston & Maine Ry.
Dodge Bros., Detroit
U. S. Government
Gary Tube Co.
General Electric Co. (6)
International Heater Co.
International Motor Co.
Levinson Mfg. Co., Jersey City
Levinson Mfg. Co., Binghamton
Robert W. Irwin Co., Grand Rapids
Crescent Furniture Co., Evansville
Detroit Water Board
Trexler Lumber Co., Allentown
Chain Belt Co.
Western Electric Co.
Fall River Schools
Sonora Phonograph Co.
American Parlor Frame Co.
Badger Sash & Door Co.
Waltham Piano Co.
Rockwell Mfg. Co.
Seaman Body Corporation
Reo Motor Car Co.
Bush & Lane Piano Co.
T. M. Goodall Co., Australia
Baldwin Locomotive Works
National Showcase Co.
C. & O. Ry. Co.
Minneapolis Schools
Anaconda Copper Mining Co.
Berkey & Gay Furn. Co., Grd. Rpsd.

"OLIVER" NO. 462-V BAND SAW BRAZE DRESSING VISE



NO. 462-V BAND SAW BRAZE DRESSING VISE
CODE — DEVOF

This vise is supplemental equipment designed for use with electric brazier. It can be fastened on the edge of any work bench by two screws. The use is three-fold, viz.:

1 — For beveling the ends of the saw blade preparatory to brazing. The right hand clamp with hardened removable plate is used for this purpose.

2 — For filing both sides of the band saw blade after the braze is made to make the thickness of the saw uniform at the braze. The leather faced curved portion of the device is used for this purpose.

3 — A saw filing vise to be used for dressing the teeth after brazing, or for general purpose band saw filing.

SPECIFICATIONS

Weight.....	35 pounds
Length overall.....	22 inches
Height.....	12 inches
Saw Vise Length.....	6 inches