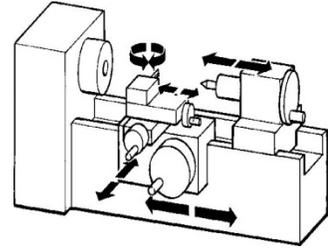


**METRO DETROIT
METALWORKING
CLUB
November 2012**



Treasury report:

Balance: \$767.05

Contacts:

President: Rick Chownyk

Vice Pres: Emil Cafarelli

Treasurer: Ken Hunt

Next meeting:

December 12, 2012

MCCC – 7pm

Secretary: Bob Farr

Publisher: John Lee

Webmaster: Steve/Doug Huck

President's message:

Merry Christmas and Happy New Year! Yep, it's that time again. Out with the old and in with the new. I have not sent out Christmas cards for many years, but I have a list of friends and relatives who I always call every year around this time! Text's, emails and even cards do not compare to sitting down with a cup of hot chocolate and having a nice hour long conversation with these folks! I encourage everyone to call an old friend or relative during the holidays! It can really lift their spirits!

Our December meeting is our annual Christmas party!!! Bring a dish to pass, if you like. The Club will provide Hot dogs, pop, chips and coffee. Wives, family and friends are always welcome!

Annual elections are also held during this meeting. As always, we encourage anyone who might like to take a position run for it! The office for President is always a good one to run for (hint, hint)!

December 21st is the Winter Solstice, the shortest sunlit day of the year ... after that we start gaining minutes of daylight each day! So I hope to see you at the meeting.

Merry Christmas all! Rick

Show & Tell: First-time visitor and now new club member Jim Kelly made an impressive introduction with his 1/3 scale flintlock mechanism –

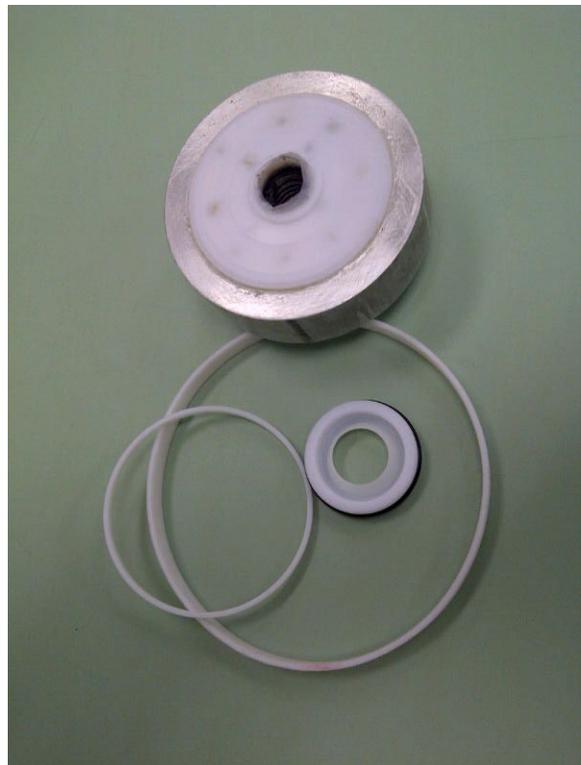


Jim is a metallurgist, retired in '05 from Rolled Alloys, Inc. (formerly in Detroit, now located in Temperance, Michigan - www.rolledalloys.com). Jim's project was made using a jeweler's lathe, files, and a cold formed spring which he tempered himself –

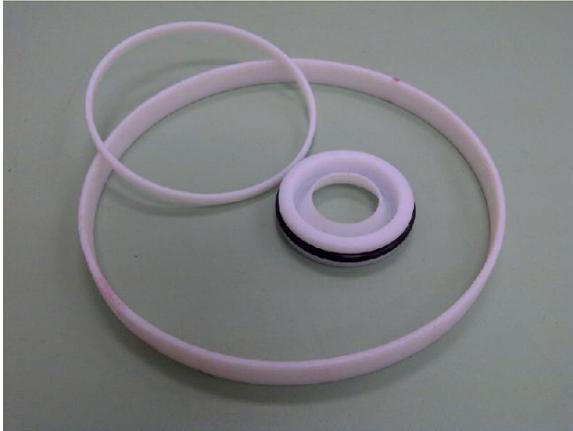


Beautiful work Jim and thank you for sharing it with us.

George Waterman is making progress on his sterling engine design. He has developed a mandrel which helps him to cut Teflon seals –



The seals help separate the crankcase from the cylinder –



George also noted that he has sourced unusual sized seals and o-rings online from the aptly named “O-Ring Store” www.theoringstore.com . He is also quite satisfied with the selection of materials available from local supplier “Industrial Metal Sales” located at 95 South Rose Street, Suite E, Mt. Clemens, Mich., (586) 783-2238. The company’s web site claims “any metal, cut so size, *fast*, no minimum order.” www.industrialmetalsales.com

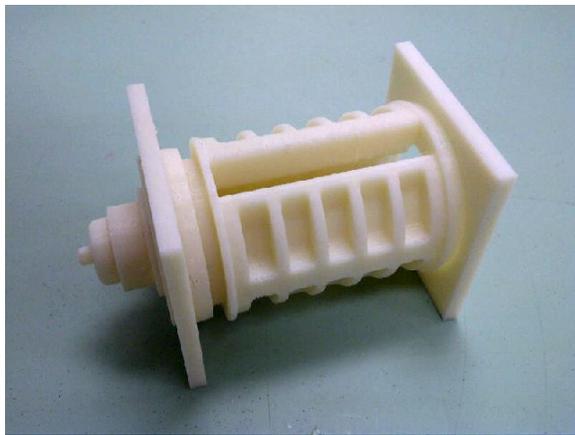
Thanks for the tips George!

James Hagel showed us one of his air-powered “wobbler” engines machined from Corian counter top material. It comes in many colors and has the appearance of stone –

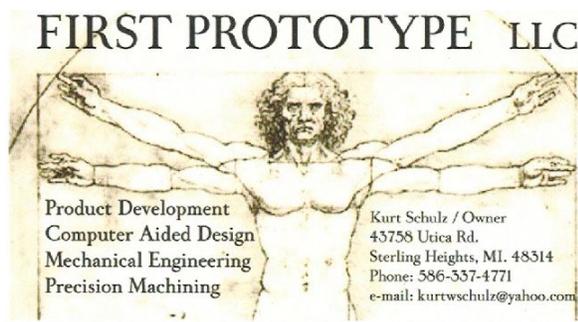


James reports that it machines freely and offered to share his source with any members wanting to try the material. Thanks for your generosity James, and for bringing your motor.

Speaking of generosity, Kurt Schulz is now using a 3D printer in his prototyping operation and offered to print club members' CAD files for the cost of the material (about \$6.00 per cubic inch *solid*)! The material is in spool form (looking much like 'weed-whacker' string) and the printer builds up the design in 0.007-inch thick layers –



Thank you for the *very* generous offer Kurt! For those interested in trying this, you can reach Kurt through his prototyping business "First Prototype LLC" telephone (586) 337-4771, email kurtwschulz@yahoo.com –



Joe Pietsch brought along several interesting items from his collection, and shared several tips. A recent article in Home Shop Machinist demonstrated a method for repairing a damaged thread in the lathe by picking up and chasing the thread to remove the displaced metal. Joe suggested instead that the repair could be made without removing the shaft from the machine by using a triangle file. Phil Shannon added that this would be a good application for the filing technique he described about a year ago: roll the file from tip to handle as the file is advanced forward for the cut to help improve accuracy and finish.

Joe also shared an item that he referred to as a 'stubbing tool' but the intended use was not immediately clear –



The lever at the top operated a knurled cam (apparently intended to grip something being stretched or tightened by the screw), and the lower screw allows the device to be clamped to a post or bench. The cast iron frame is marked “Hose Stay Put Tool Co., Denver, Colo.” –



A patent number was marked on the opposite side and some post-meeting research revealed that this device was patented in February, 1935 “for the usual purpose of securing one hose section to another or for the attachment of a coupling-member at the end of a hose” using ordinary wire. The wire is looped around the hose, the ends are secured by the knurled cam, the wire is stretched tight by the screw, and the wire ends are then twisted, released from the cam and trimmed to length.

A copy of the patent is attached to this newsletter. If you can find an item’s patent numbers you can access the related claims and drawings online via the USPTO office (www.uspto.gov), or Google (www.google.com/patents). Thanks Joe!

Dr. Mike Jostock offered for sale several dental drill hand pieces which he thought would be very useful to our members. The spindle is driven by 35lbs of air to 500,000 rpm’s (that is *not* a typo). The unit has a socket at the back for air in, air out and coolant supply lines. The cutting burs are diamond or carbide, come in many lengths and tip shapes, and should be capable of cutting hard materials such as tool steel and glass. Contact Mike if you are interested: (248) 652-1762.

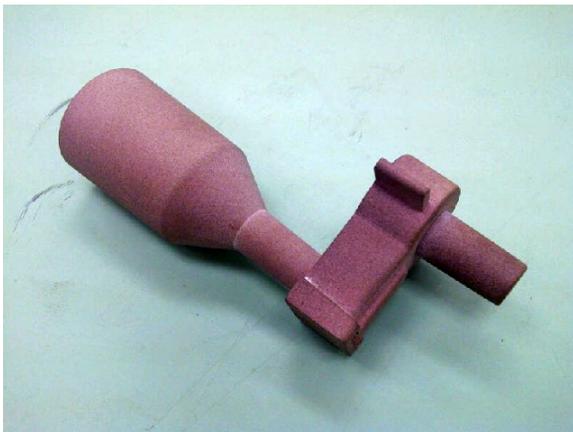
Rick Chownyk shared a project he was working on with Steve Huck. It is a version of the ‘Gotham Deezil’ model engine first designed before WWII –



The cone in the upper picture is simply the casting sprue, removed when cool. The engine runs on diesel fuel (or some similar concoction) and lacks a traditional spark or glow plug. Ron Peters noted that compression alone *will* ignite the fuel even in a cold engine if a bit of ether is added to the starting charge. Here is a link to a YouTube video of such an engine running, quite nicely –

<http://www.youtube.com/watch?v=Wmc7TgLParo>

Here is the Rick & Steve version again, with the crankcase and sprue united –



The casting pattern is made from a machinable foundry product that Rick called “REN.” More info is available here: www.freemansupply.com

Rick reports that if the engine works well they may make PDF files of the plans available to MDMC members.

Merry Christmas!

Bob Farr – Secretary

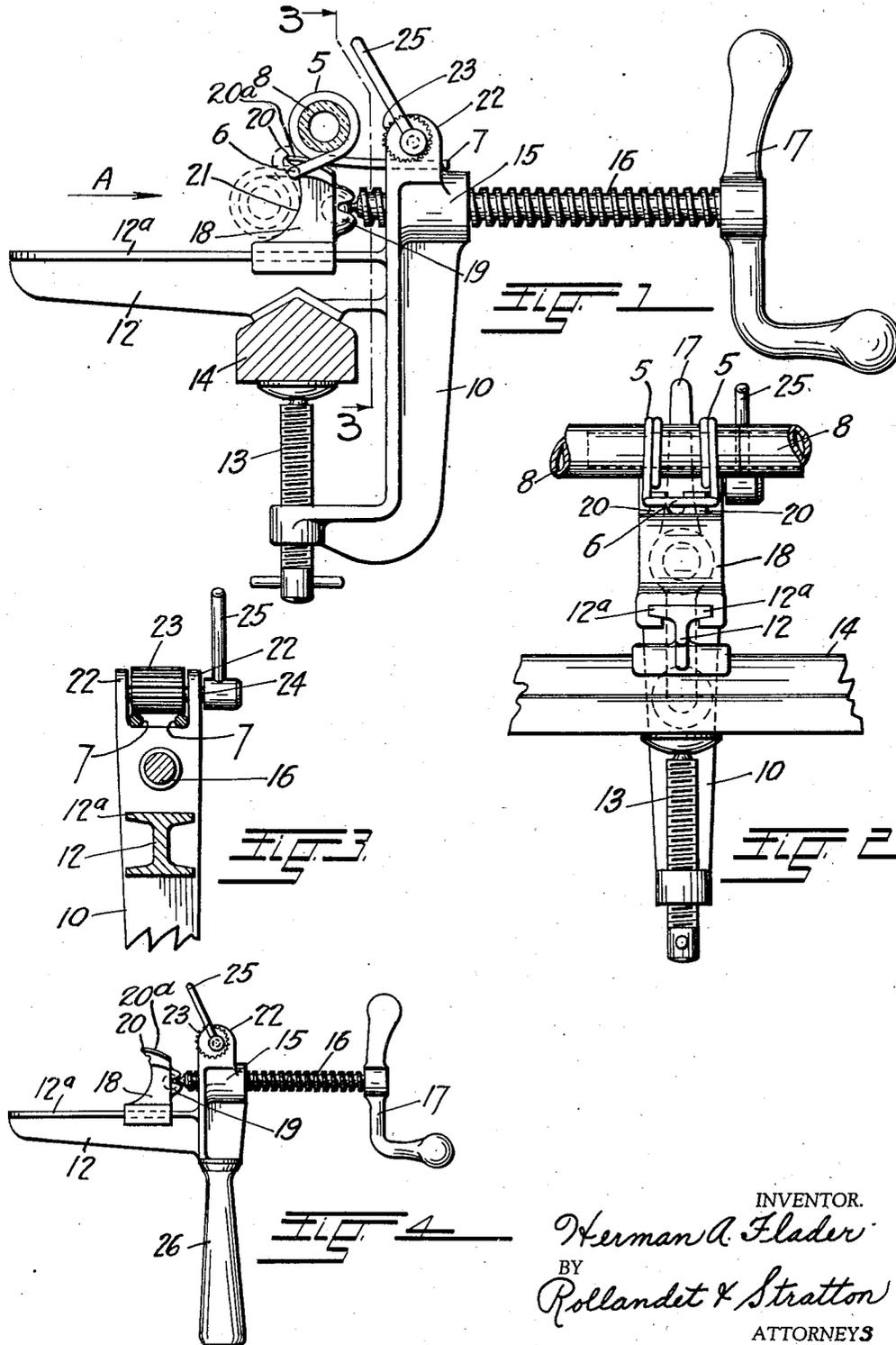
Feb. 12, 1935.

H. A. FLADER

1,990,820

CLAMPING TOOL

Filed Feb. 24, 1933



INVENTOR.
Herman A. Flader
BY
Rolland & Stratton
ATTORNEYS

UNITED STATES PATENT OFFICE

1,990,820

CLAMPING TOOL

Herman A. Flader, Denver, Colo.

Application February 24, 1933, Serial No. 658,311

2 Claims. (Cl. 81-9.3)

This invention relates to implements for applying clamps to hose for the usual purpose of securing one hose-section to another or for the attachment of a coupling-member at an end of a hose.

The clamps to which the invention is particularly adapted, consist of a U-shaped piece of wire or other flexible material bent to form hose-encircling loops between a bight member and substantially parallel leg-members.

In the use of an implement of the character of that of the present invention, the loops are tightened around a hose to which the clamp is applied, after which the leg-members are twisted around the bight-member to secure the clamp in place.

It is an object of the invention to produce this result in an effective manner by the use of an efficient and simple mechanism.

An embodiment of the invention has been illustrated in the accompanying drawing in the several views of which like parts are similarly designated, and in which

Figure 1 is an elevation of the implement in its operative position relative to a support, and to the work, both of which are shown in section,

Figure 2 is an end view of the device looking in the direction of the arrow A in Figure 1,

Figure 3 is a fragmentary section taken on the line 3-3 of Figure 1, and

Figure 4 is an elevation of a modification of the implement shown in Figure 1, drawn to a reduced scale.

Referring further to the drawing, the clamp to be applied to the hose, comprises a U-shaped piece of wire, formed to provide the hose-encircling loops 5, the bight-member 6 connecting the loops, and the substantially parallel leg-members 7 projecting oppositely from the same. This clamp is applied to the hose 8, as shown in the drawing, and an implement according to the present invention is employed to tighten the loops around the hose by drawing the leg-members and the bight-member of the clamp in opposite directions. Subsequently the leg-members are twisted around the bight-member by movement of the hose, while the clamp is held in its tightened position by the implement.

With this purpose in view, the implement, as shown in Figures 1 to 3, inclusive, comprises a body-part 10, a guide-member 12 projecting laterally thereof, and a screw 13 cooperating with the guide to fasten the implement to a work-bench or other stationary support shown at 14.

The body has a head 15 provided with a

screw-threaded opening for the application of a screw 16, which at one end has a crank 17 for its manual rotation.

The guide 12 is of substantially T-shaped section for the slidable support of a block 18 which embraces the flanges 12a of the same.

The screw is connected with the block by a ball-and-socket joint 19.

The block functions as a carrier for the hose and has at an end of a slightly curved hose seat 20a a nose 20 to engage the bight-member 6 of the hose-clamp, as shown, and below the seat is a curved stop 21 to engage the hose with the clamp in place when it is turned around and across the nose.

The body 10 of the clamp has two ears 22 projecting upwardly from its head between which is rotatably supported, an eccentric clamp 23. The periphery of this clamp is preferably toothed or otherwise roughened. The clamp 23 is mounted between the ears 22 by means of a pin 24 which at one end carries a crank 25 for manual rotation of the clamp.

In the use of the implement, the eccentric clamp 23 cooperates with the surface of the head between the ears 22 to rigidly secure the leg-members 7 of the hose clamp.

The modification illustrated in Figure 4 of the drawing, differs from that hereinbefore described, in that the body of the implement is formed to provide a handle 26. In using a device of the modified construction, it is held in the hand of the user instead of being fastened to a work bench or other support.

In the operation of the invention, the hose clamp applied around a hose-section, is placed upon the seat 20a of the block 18 with its bight-member 6 engaging the nose 20 of the block, and with its leg-members rigidly secured to the body of the implement by the eccentric clamp 23. The block is moved along the guide away from the head 15 by manual rotation of the screw 16, thereby tightening the loops 5 of the hose clamp around the hose, which usually is provided with a rigid core cooperative with the clamp. After the loops of the hose clamp have been tightened, the hose is manually turned around the nose of the block and onto the stop 21 of the same, to the position shown in broken lines in Figure 1.

This movement of the hose causes the leg-members to twist around the bight-member of the hose clamp to secure the clamp in its tightened condition. After the hose is removed from the implement, the superfluous end-portions of

the leg-members are severed and the twists may be tightened around the bight by means of a pair of pinchers or other suitable tool.

5 The nose 20 of the block may be bifurcated, as shown in Figure 2, and the eccentric clamp is of sufficient width to secure three or more leg-members, should the hose-clamp be formed in this manner.

10 During the operation, as above described, the implement is either secured to a stationary support, as in Figure 1, or it is held in the hand of the user as in Figure 4.

What I claim and desire to secure by Letters Patent is:

15 1. An implement for tightening a hose clamp having coils and a bight-member and leg-members at opposite sides thereof, comprising a body having a guide-way, a block slidable on the guide-way, having a nose to engage the bight-member and having above said nose, a seat 20 for the support of the hose, and below the same,

a stop to engage the hose when turned manually from its seat, around the nose, in a revolving motion, a clamp on the body to hold the leg-members of a hose clamp on a hose resting on the seat, and means on the body for moving the block along the guide-way. 5

2. An implement for tightening a hose clamp having coils and a bight-member and leg-members at opposite sides thereof, comprising a body having a guide-way, a block slidable on the guide-way, having a nose to engage the bight-member and having above said nose, a curved seat for the support of the hose, and below the same, a stop to engage the hose when turned manually from its seat, around the nose, in a revolving motion, a clamp on the body to hold the leg-members of a hose clamp on a hose resting on the seat, and means on the body for moving the block along the guide-way. 10 15 20

HERMAN A. FLADER.