The TOOL SHED

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SHOEMAKING: CURRYING THE SOLES

by Raymond R. Townsend

In shoemaking both the sole and the insole of the shoe go through a preliminary process of beating with a hammer to make the fibrous tissues more dense, and thus less pervious to damp and more resistant to wear.

The eighteenth-century French method, as recorded in the Encyclopaedias of Diderot and Betrand, and referred to as "courroyer une semele" (currying a sole), is quite similar to the English and American methods.

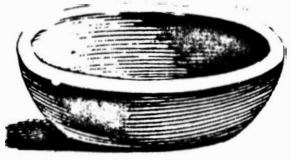

Figure 1: French soaking tub, eighteenth century (Diderot).

The soles, always of cowhide, are first soaked in a tub of clear water (see Figures 1 and 2) and then allowed to partially dry in natural air until they are soft and pliable, referred to as "mellow."

Figure 2: German soaking tub (Duden, 1935).

When mellow, the sole is placed grain side downward on a block, which is usually a tree trunk, or on a "large stone" (lap stone), shown in Figures 3 and 4.

Diderot states that the peen of the hammer is used to beat the leather; Betrand says that the face is used,

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LEATHERWORKING TO BE FEATURED AT NOVEMBER 21st MEETING

The next meeting of CRAFTS of New Jersey will be held on Sunday, November 21, at East Jersey Olde Towne in Piscataway.

The meeting will begin at 1:00 p.m. with the Swap & Sell. The formal program will start promptly at 2:00.

The program for the afternoon will feature Mr. Tom Romano, who will speak on "Bridle Making & Leather Tooling." Members are asked to

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SPECIAL NOTICE!!

Because of the resignation of Carroll Palmer (see page 3), CRAFTS President Stephen Zluky is temporarily doing double duty by also filling in as Treasurer.

Therefore, until further notice, please send membership dues (now $7.00 per year) to: Stephen Zluky, Box 243, Whitehouse, NJ 08888.

CRAFTS of New Jersey

Collectors of Rare and Familiar Tools Society of New Jersey

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Membership in CRAFTS is open to anyone interested in early trades and industries, and the identification, study, and preservation of tools and implements used and made in New Jersey. Annual dues are 7 dollars for the membership year of July 1 to June 30.

The Tool Shed

Published five times per year for members of CRAFTS of New Jersey. Editor: Robert Fridlington, 8 Keith Jeffries Ave., Cranford, NJ 07016. Contributions, especially about New Jersey tools and trades, are welcomed.

THE DISTAFF SIDE
by Dorothea Connolly

As I promised in the last issue, here are some explanations of phrases that we use in everyday speech.

Let me start of with "distaff," as it is used in the name of this column. A distaff was the staff used for holding flax or wool when spinning. Distaff in the sense of meaning "female" goes back to medieval times when much of a woman's time was taken up at her spinning wheel. As early as 1488 the word was in common use as a symbol of womankind.

The phrase "eating high on the hog" is still used when we express our feelings about someone who has achieved a prosperous life. That is because the high meat of the hog, such as crown roast of pork or loin chops, is more tender and more expensive.

Today if we tell someone to "mind their P's and Q's," we mean that they better be on their best behavior. But

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A TRIBUTE TO SAND MOULD MAKERS

When program chairman Fred Shippey introduced Harry O'Neill as the featured speaker at the CRAFTS meeting last June 6, he truly waxed poetic.

The subject of O'Neill's talk was pattern making and moulding, and Shippey introduced him with a poem entitled "A Tribute to Sand Mould Makers."

The muse of poetry was not Fred's only inspiration, however. He claims that his effort contains the names of 22 tools or items that Harry had mentioned in his article on moulder's tools that appeared in the November, 1981, issue of The Tool Shed. Count 'em—22!

Here, then, is "The Tribute to Sand Mould Makers."

Sand mould makers are a breed apart;
They know tool shapes: slick, leaf,
square, and heart.
With bench bellows, they blow out
loose sand;
Even venting tools, they understand.

Don't let them stump you with a
riddle;
Their patterns are split down the
middle;
Watch the flask with no liquor in it:
Beware tamp holes beyond a limit.

Use the bench rammer to make a
spoon;
Or drag a bottom board during June.
Squeeze a bulb sponge to wash out a
sprue;
Ask help to cope with a lifting screw.

Play with a gate cutter, just like new;
But leave not the rapping bar askew.
Solve this riddle, and see how you
feel;
Today's talk is by Harry O'Neill.

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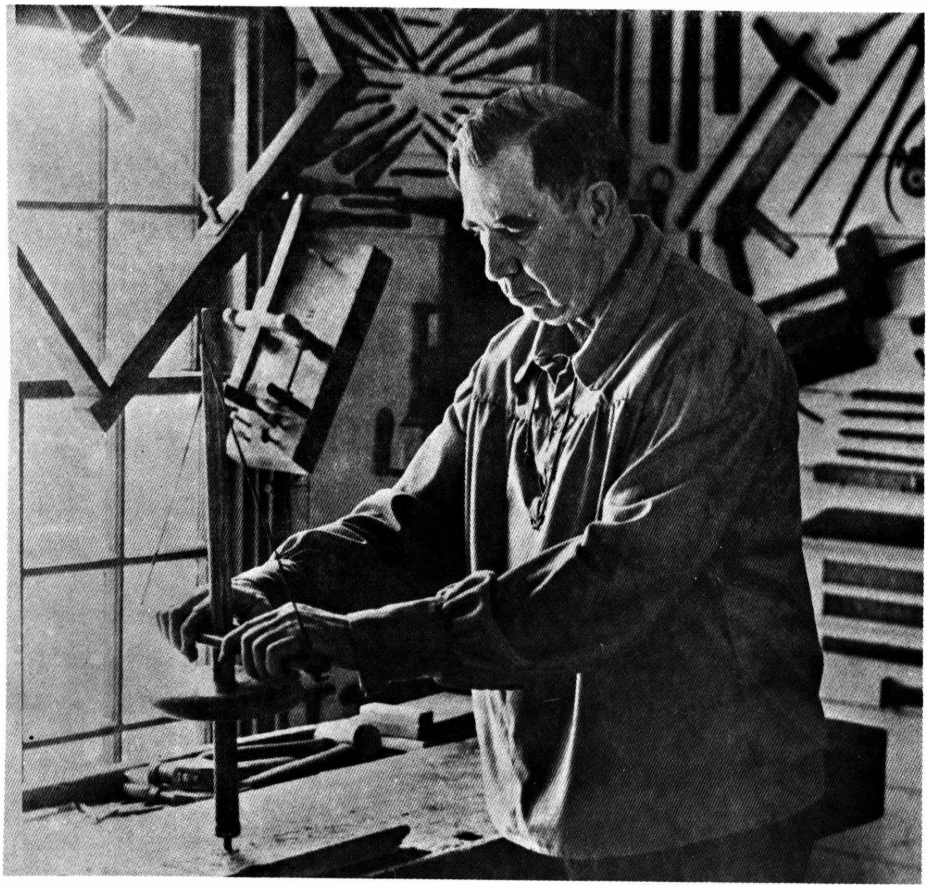
TREASURER C. CARROLL PALMER RESIGNS



Carroll Palmer at his workbench

Because he has moved out of state, C. Carroll Palmer has resigned from his positions as Director and Treasurer of CRAFTS of New Jersey.

Only something important would cause a life-long Jerseyman to pull up stakes and leave his native state. Well, this was important. Carroll got married.

His lovely bride is the former Hazel Bullman of Williamsburg, Va., and Carroll now resides in the Old Dominion, His new address is: Rte. 1, Box 179A, Williamsburg, VA 23185.

On February 23, 1934, Carroll bought his first antique tool, a pair of hand-wrought calipers. The price was 10¢. He has been collecting tools ever since.

In 1935 he joined EAIA, and he served as a director of that organization from 1942 to 1958. He also served as Chairman of the old Sprague Chapter Number One of EAIA.

Back in the fall of 1977 Carroll was one of the founding members of CRAFTS, and he has been a Director and the Treasurer from the beginning. He has been a regular at the spring auctions, and he was always on hand at East Jersey Olde Towne on the Fourth of July.

No one has worked harder to make CRAFTS of New Jersey a success, and no one has enjoyed himself more in the process. He is going to be a difficult man to replace.

On behalf of all of our members we extend to Mr. and Mrs. C. Carroll Palmer our very best wishes for every happiness.

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THE EUROPEAN DOVETAIL PLANE

by Raymond R. Townsend

The dovetail plane appears to be rather common on the European continent. Josef H. Greger, Die Geschichte des Hobels, states that the German name for this plane, Grathobel, has been in evidence since the sixteenth century.

Greger proposes that if the sole of a rabbet plane is formed at the right side of the stock into an angle of from 72° to 80° the rabbet plane forms the dovetail plane. The latter cuts out of the wood an acute angle and leaves behind at the rim a sharp edge, the ridge or Grat. Greger illustrates a Grathobel dated 1698.

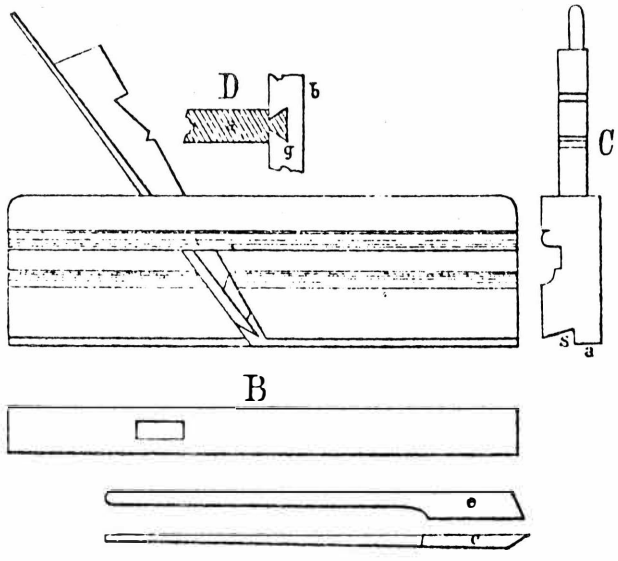

Figure 1

The use of the dovetail plane is well illustrated in the geometric views (Figures 1 and 3) from Werkzeugkunde . . . (Work Knowledge), published in 1869. Figure 1 shows the common type of this plane and, under D, two pieces of wood joined by a dovetail joint. The author states: "The groove is piece b, after they have made two convenient sloping cuts with the dovetail saw [Gratsäge], is cut out by means of a chisel and the bottom smoothed with the router. The projection g in the piece a is made with the Dovetail Plane, and, of course, produced at first on one and then on the opposite side."

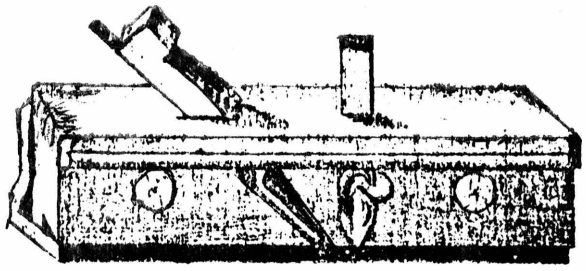

Figure 2

Figures 2 and 3 show a dovetail plane with ledge and adjustable side at a and w for different width ridges. (Grathes). It has, so that it is also suitable for cross grain, a skew iron (not illustrated, but which can be seen by the shape of the throat). The middle screw r in Figure 3 fixes the nicker s that precedes the plane iron and cuts off the grain crosswise. As to the rest, it is similar to the simple dovetail plane shown in Figure 1.

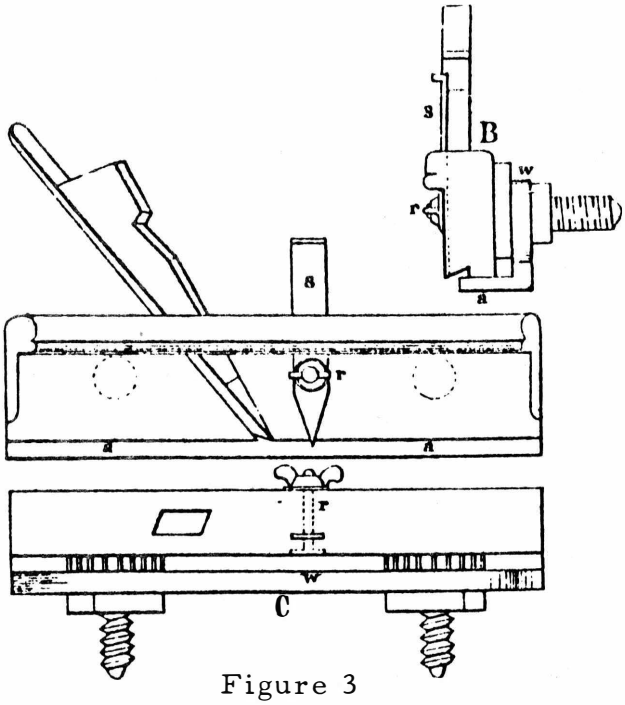

Figure 3

The Joh. Weiss & Sohn Catalog (Wien, 1909) shows the common type dovetail plane (Figure 4), similar to

the one in Figure 1 above. This plane, designated "Nr 17, Grathobel," came in 15, 18, and 21 m/m widths of cut.

Figure 4

The Weiss catalog also shows two Stellgrathobel, or adjustable dovetail planes. No. 18 has one adjustable fence for width and is almost identical to Figure 3. No. 18 1/2 has two adjustable fences, one for depth and the other for depth.

The Lachappelle German-French catalog, No. 12 (1945), shows three types of dovetail planes (see Figure 5 below).

No. 85 is the common "fixed" type, similar to Figure 1.

No. 86 has one metal fence and a nicker. An 1894 source shows one very similar to this, which has a brass strip on the sole to prevent wear.

No. 87 has two metal fences, one for depth and one for width.

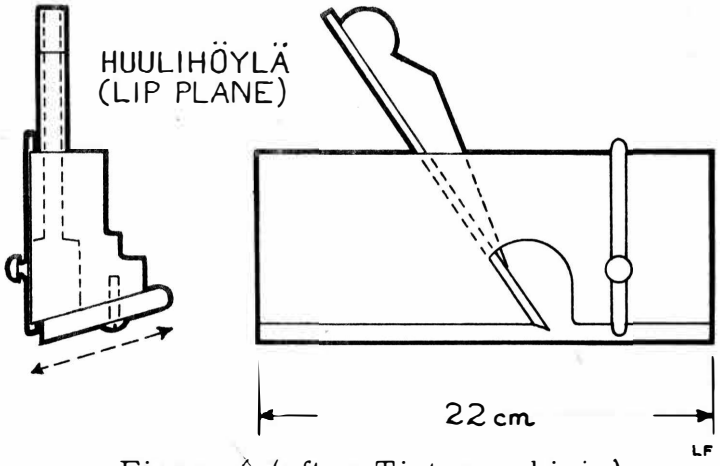

Figure 6 (after Tietosanakirja)

The Finnish Tietosanakirja, or

(continued on page 8)

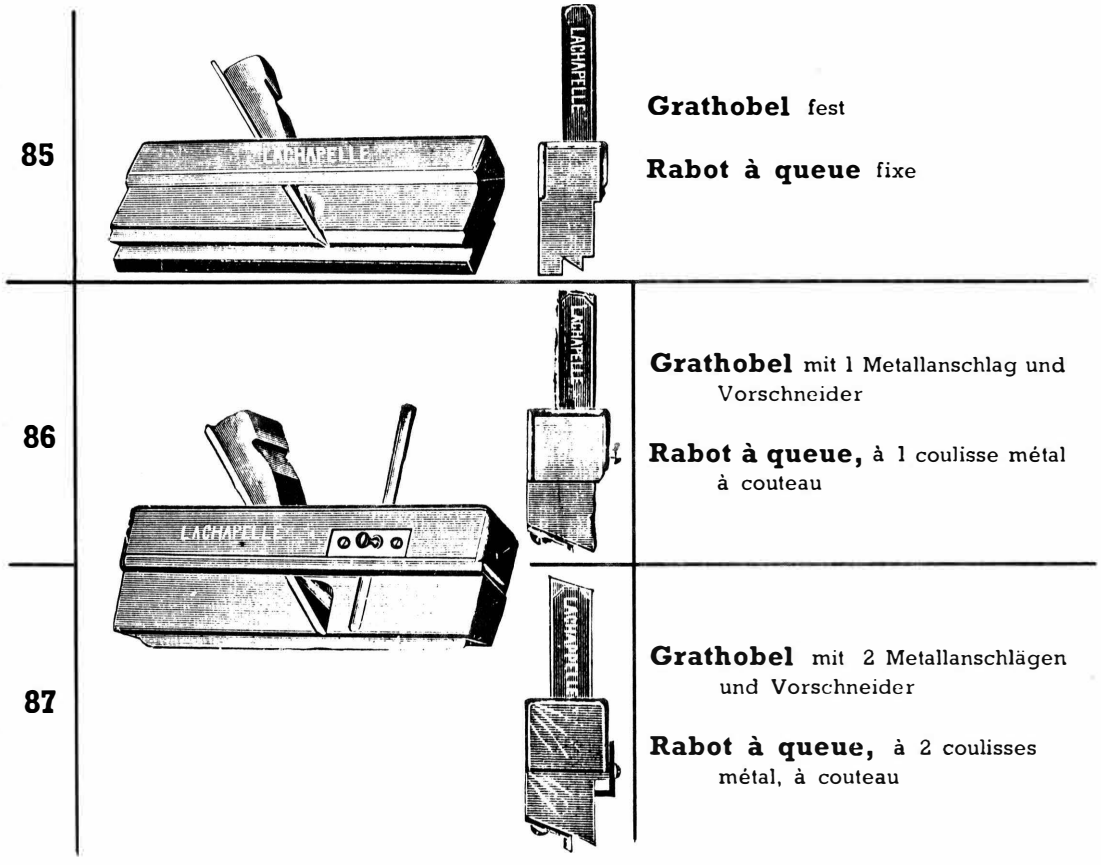

Figure 5

(Shoemaking, cont'd from page 1)
which is the common and usual method.

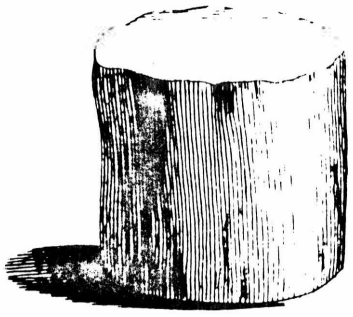

Figure 3: Beating block (Diderot).

A 1916 source explains the use of the convex face of the hammer: "The shoemaker having mellowed the leather takes either a lapstone or a flat piece of iron and administers a series of blows; commencing at one corner or sometimes in the center, he causes each successive blow to lap over the previous one...." When this method is used to compress the leather "no difficulty arises through its being uneven in substance since the face of the hammer is so small...."

Figure 4: Stone used as a lap stone (Old Sturbridge).

For use as a lap iron a late 19th century source recommends "a laundress's iron with the handle off— placed on your thighs, just above the knees."

An 1894 catalog illustrates a manufactured "Lap Iron, for hammering out stock" (Figure 5). A 1908 catalog refers to its "Crispin Lap Iron," named for the Patron Saint of the Shoemakers. As the catalog explains: "This is a handy device for Shoemakers taking the place of the lap stone; it is made of solid cast iron and is ground on the face."

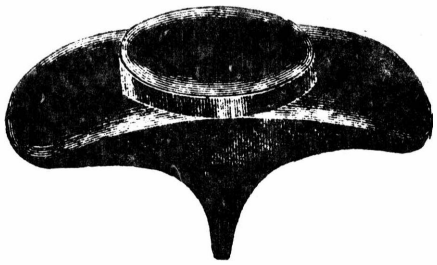

Figure 5: Lap iron.

The 18th century French shoe hammer illustrated in Betrand (see Figure 6) has changed little over the years. Figure 7 shows "a well constructed hammer of the French type" from the United Shoe Machinery catalog of 1921. "This is the popular type of hammer used so extensively by the old shoe makers."

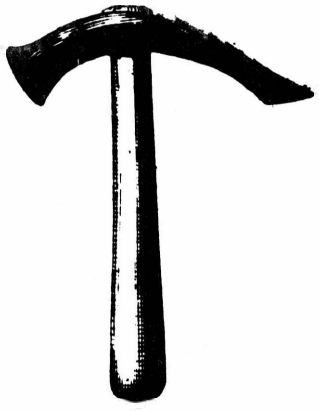

Figure 6: 18th century French shoe hammer (Betrand).

The distinguishing feature of this hammer, not noticeable in the many other styles of shoemaker's hammers, is the graceful curving upwards from the face to the eye and then downward and outward at the peen.

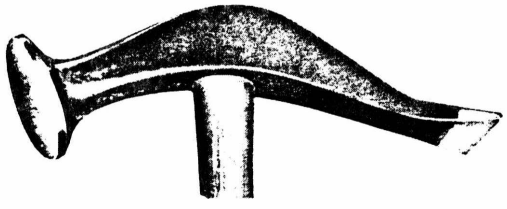

Figure 7: USMC French shoe hammer.

Figure 8 is from the English Richard Timmins & Sons catalog. Note the manner in which the handle is attached to the head.

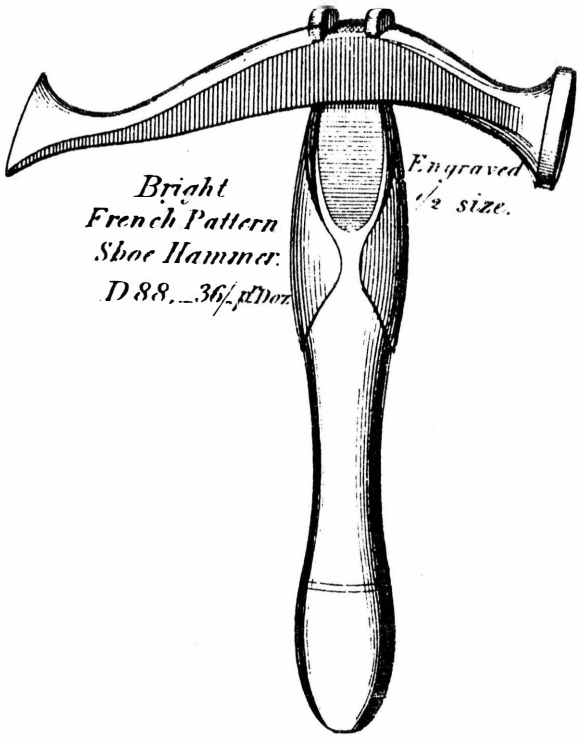

Figure 8: Bright French pattern shoe hammer (Tools for the Trades and Crafts. Kenneth D. Roberts. Permission granted).

Figure 9 shows a similar hammer, but with a wedge handle, from an early 20th century English catalog. Note the smooth, convex faces of these hammers.

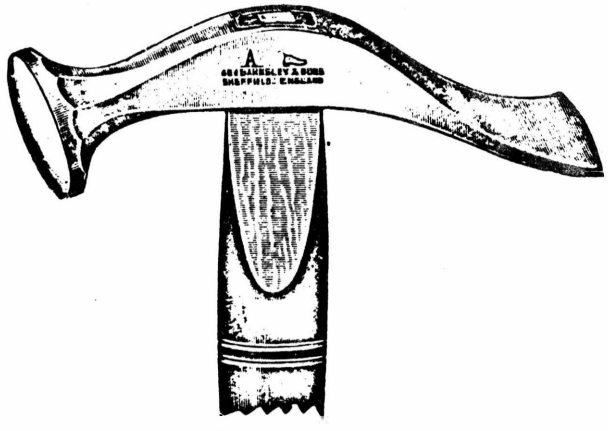

Figure 9: French pattern hammer.

Sometimes confused with the French hammer is the German pattern (Figure 10). But the German pattern can be distinguished by its straight descending peen.

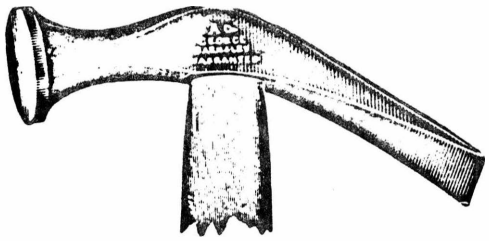

Figure 10: German pattern hammer.

The best known English and American styles (Figures 11 and 12) are still found today in most cobbler (repair) shops.

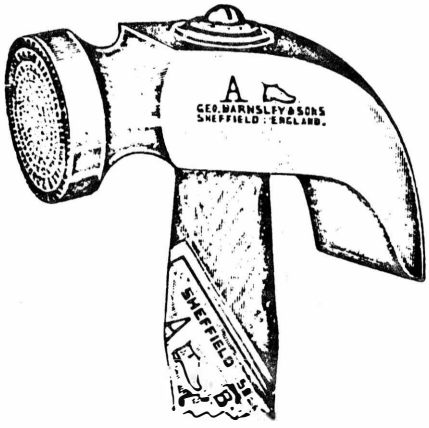

Figure 11: English cordwainer's pattern hammer.

These hammers have either a smooth or a "rough" (corrugated) face. The former is used for lasting or beating, as described, and the latter for driving tacks.

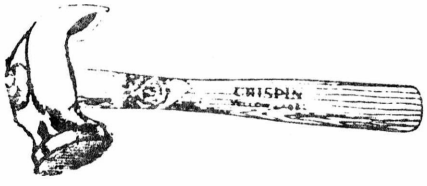

Figure 12: Crispin shoe hammer (USMC, 1921 Catalog).

Both the English and American

(continued on page 8)

(Dovetail Plane, cont. from page 5)
"Encyclopaedia," (Helsinki, 1906) reveals the use of the dovetail plane and the dovetail saw outside of Germany.

In Finland the plane (Figure 6) is known as the Huulihöylä, or lip plane. The saw is called a Särmäsaha, or edge saw, and the joint is a Sinkkaus (see Figure 7).

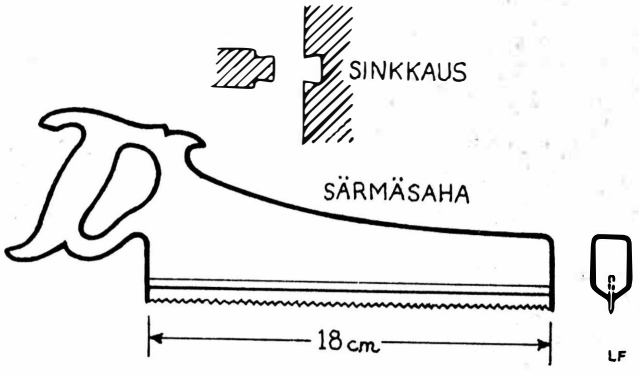

Figure 7 (after Tietosanakirja)

The European dovetail plane has probably found its way into tool collections, with its true function unknown by the owner.

The late Robert H. Carlson, of Deep River, Conn., had one and was aware of its use. It had a fixed depth similar to the examples shown in Figures 1 and 4. As he said: "No depth stop, you have to do it by eye." It did have a nicker and had the name Rosnoeski on it.

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(Meeting, continued from page 1)
bring special or unusual leather worker's tools for display.

Members are also asked to bring an item for the "Whatsit?" identification session, which will be conducted by Harry O'Neill.

And please remember to turn in your tool display survey forms if you have not already done so. Returns have been slim.

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(Shoemaking, cont. from page 7)
styles of shoe hammers have peens that turn down quite sharply (see Figures 11 and 12). Because of this, neither would be suitable for peen work.

The peen of the G. B. Germond American patented steel-faced hammer (Figure 13), a general style commonly found in early 20th century catalogs, does not curve down as sharply. Thus, this style can be used for peening heels and soles.

Figure 13: G. B. Germond's patented steel-faced shoe hammer.

Diderot (Figure 14) illustrates an entirely different style of hammer, one not characteristic of any types found to date. The peen of this hammer curves downward in a manner characteristic of the English and American styles. One of its more unusual features is that it has a bolt handle, similar to those on some cooper's adzes.

Figure 14: 18th century shoe hammer, similar to English and American styles (Diderot).

Among the tools of the shoemaker are other types and styles of hammers that are used for specialized work. But they are a subject for a future article.

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THE "OIL WELL" CHIEF

by Robert Fridlington

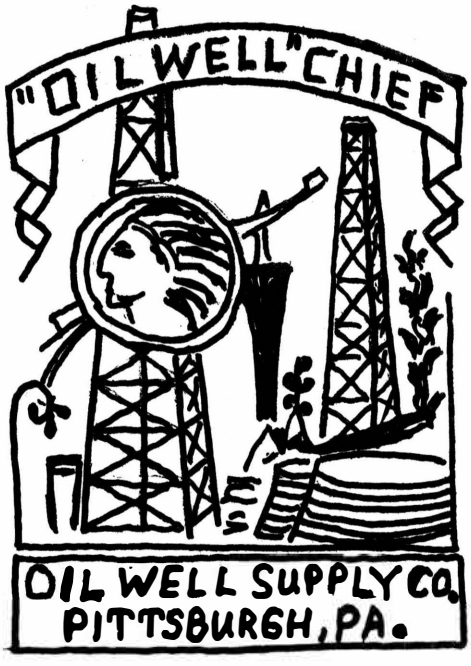
Usually when I buy an axe I am attracted to it because of its pattern, the maker's signature, or one of those attributes that indicates place of origin or age.

On occasion, however, I have been known to break down and buy an axe solely because of an unusual "label" that has been stamped into the metal.

At a flea market recently I found one of this latter category, with probably the most elaborate markings that I have ever run across, complete with oil derricks and wooden storage tanks.

The axe is an "Oil Well" Chief (somehow the quotation marks seem misplaced), made, or perhaps sold by, the Oil Well Supply Co. of Pittsburgh, Pa. It is a heavy broad axe, with a 12" blade and a 2 1/2" steel edge laid in.

The stamping on the side of the axe is shown below, though my clumsy drawing does not do justice to the design.



Any information about the history of this axe or the Oil Well Supply Co. would be appreciated.

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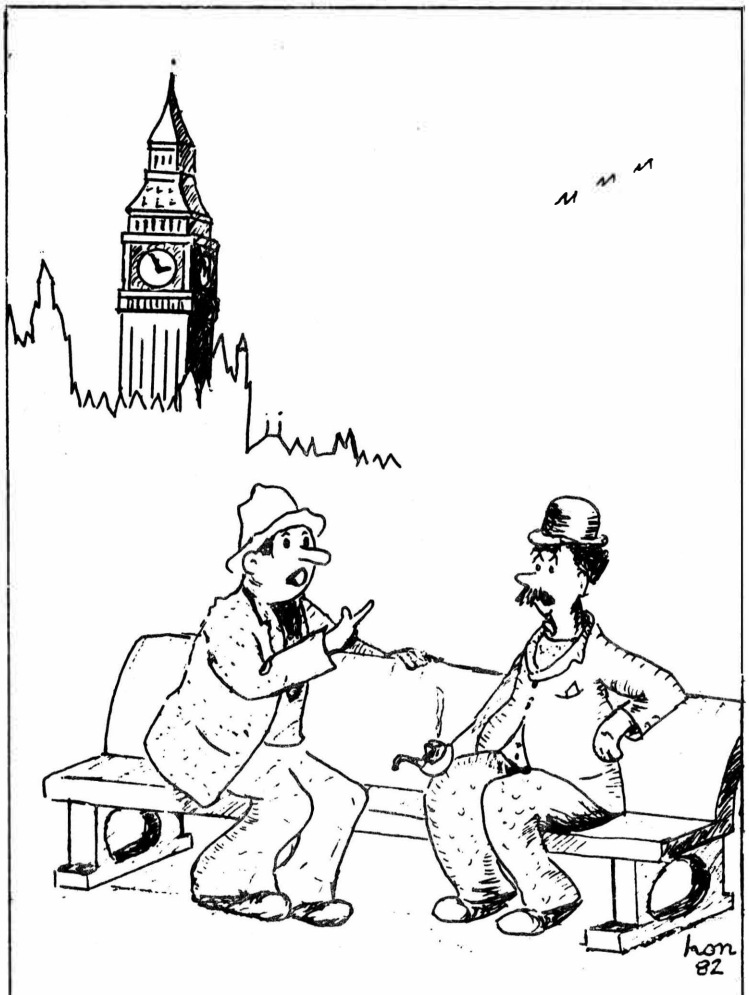
(Distaff, continued from page 2)
in earlier times the tavern keeper or serving wench kept a record on a black board of the pints and quarts (P's and Q's) that their customers drank. Another version of the origin of this phrase is that schoolteachers used to tell their scholars to watch the difference between the p and the q, which are almost the same but with the bulge reversed.

The expression "get down to brass tacks" came about when the owners of general stores put tacks into their counters at set intervals to enable them to measure material.

"Getting up on the wrong side of the bed" comes from the old superstition

(continued on page 12)



"Did ya 'ear? The Queen is recalling all the ULTIMATUMS due to a manufacturing defect."

SOME NOTES ON PRESSING IRONS

by R. James Aber

The common style of flat iron was often called a "sadiron". This was a derivation from a word meaning solid. Solid they were, and tiring to use. The heavier the iron the longer it held the heat.

Sadirons were manufactured in triangular and double-pointed shapes. Some had stationary handles and others came with detachable handles that could be used with a set of irons. The first sadirons were blacksmith-made but a number of manufacturers began factory production. These are the irons most usually seen. Many bear the initials of the maker and the weight in pounds in raised letters and numerals on the top of the iron.

Sadirons usually had iron handles which heated along with the base and required a cloth to protect the user's hands. The 1902 Sears Roebuck catalog offered a square asbestos pad for holding hot irons at 5¢ each.

Sadirons were very heavy and clumsy to use but were the only thing available for many years. The development of electricity later enabled manufacturers to produce a lightweight iron.

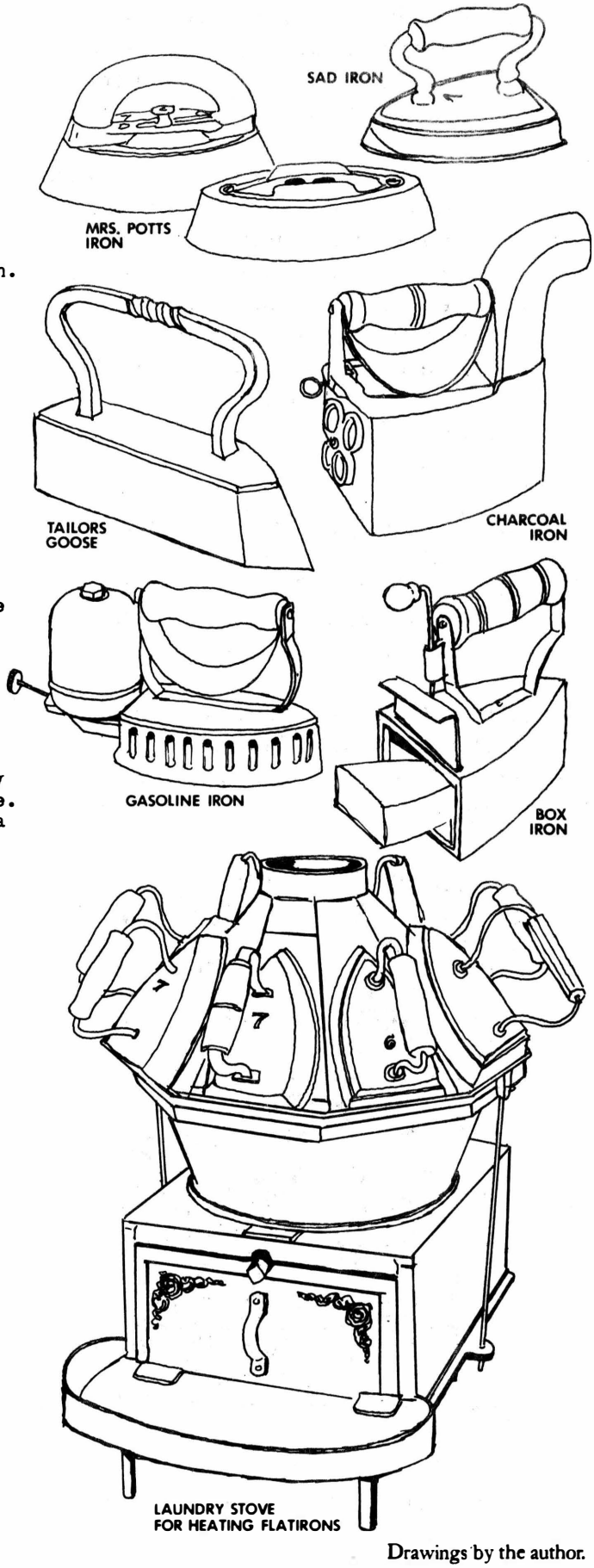
However, even the first electric irons were unnecessarily heavy. Apparently the designers and housewives thought weight was necessary to do a good job of smoothing. Fortunately it has been proven that heat does the job sufficiently and so today's irons weigh a fraction of the old sadiron.

Sadirons were used in pairs or sets. One was left heating while the other was used. They were heated on a stove or on a stand over a fire. Before they could be used, they were rubbed on a piece of brown or waxed paper to clean off soot and dirt from the stove or fire.

While most homes would have only 2 or 3 sadirons which could be heated on the kitchen stove or in the fireplace, commercial laundries needed many irons and they had specially made heating stoves designed for this purpose. The stoves were made of cast iron and were heated by a coal fire. A flue was attached in the center to carry off smoke and gases and the irons ringed the stove supported at an angle. This made them easy to pick up and replace as they cooled in use. Fuel was fed through a door in the front near the bottom and the draught controlled the rate of burning and the rate at which the irons could be reheated as they were used. This stove also radiated a lot of heat into the work room. Being a laundress on a hot, humid summer's day must have been an exhausting job.

In 1871 an iron with an interchangeable wooden handle was invented in America by Mrs. Potts. Mrs. Potts' sad irons were pointed in front and back in contrast to the usual flat-backed sadiron. Offered in the 1902 Sears catalog at 67¢ a set which consisted of one iron with rounded end, weight 4 pounds; two with regular ends, one weighing 5 1/8 pounds and one 5 3/8 pounds; one detachable wood handle with forged stretcher and one iron stand. Cost for the same set with polished bottoms and nickel plating was 73¢.

Other makers soon copied the idea of the detachable handle. The N. R. Streeter Company



Drawings by the author.

of Groton, N.Y. made a line called "Sensible Irons". These and their stands often are found at garage sales or flea markets.

The walnut handle did not get as hot since it was detached from the heating iron and used only to pick up the heated iron and while ironing.

Other 19th century irons were box irons. These had a door in the back and the bases were hollow. A heated slug was inserted in the base and provided a clean heat since the iron was not placed on the stove or in the fire. Several slugs could be heating while one was in use in the iron.

Another type of iron was heated by putting burning charcoal in the base. The base had sliding louvres in the back which controlled the draught to make the charcoal burn faster to produce more heat. It had a chimney on the front to carry fumes away. By blowing into the back or swinging the iron back and forth the charcoal was fanned to produce more heat in the iron.

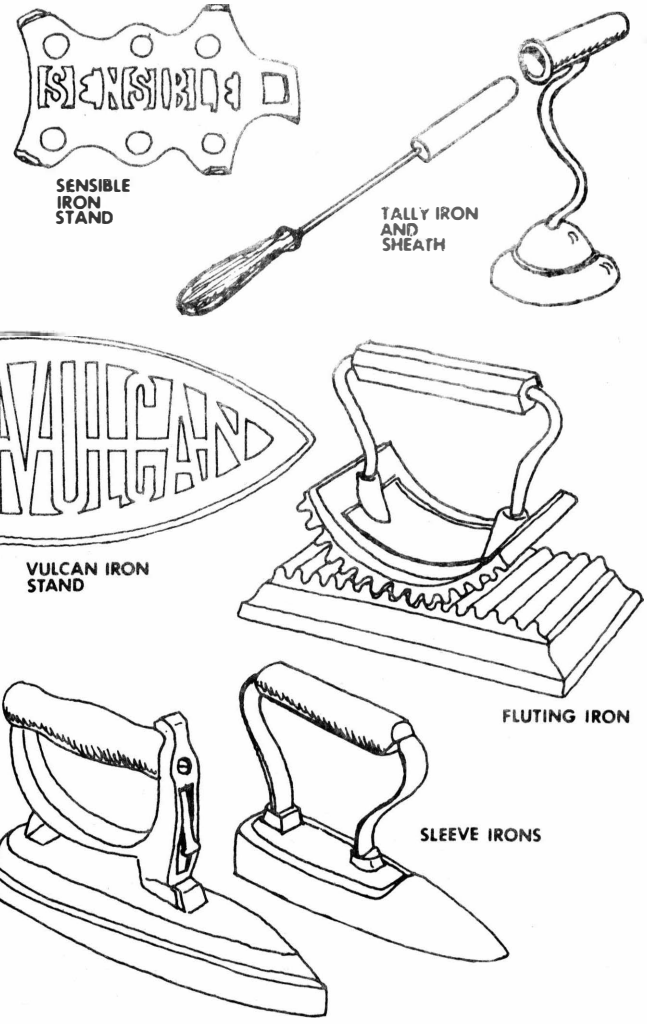
Another type of iron was heated by burning gasoline. It had a gasoline tank mounted on the back of the iron and a fire burned in the base of the iron. These were very dangerous from the standpoint of flames shooting out of the base and burning the user and from the risk of explosion. They were not too widely used.

A finishing or tally iron was used to smooth the edges of garments. These have been referred to as "goffering irons" but this term is not correct. Goffering was a crimping process used in gathering and pleating ruffles. The iron did not come in contact with the fabric but was inserted into a metal sheath and the material to be ironed was slid over the sheath. This kept the clothes clean. The irons were cigar-shaped and like a soldering iron had a wooden handle and a long rod supporting them. They were heated in the fire and could be safely carried to the sheath by the wooden handle. Some of the stands for the sheaths were elaborately turned brass with three feet. Very similar in design to candle table bases. Most were simple round iron bases which held a curved rod with the sheath mounted on the top in a horizontal position.

Tailors used long narrow irons with an iron handle and referred to as a "goose". They were sold by the pound. In 1902, Sears offered a 12 pound one for 48¢. By 1908 the price had risen to 70¢. In 1902 a twenty pound goose cost 80¢. In 1908 the price was $1.18. They were made in weights from twelve to twenty four pounds. The tailors wanted the heavier weight for pressing wool and for flattening seams.

Irons were sold with stands to rest the iron on when the fabric was being shifted to an unironed portion. These stands are collected today, and reproductions have been made by the millions and are being used for holding hot kettles and dishes or as decorations. They are often erroneously referred to as "trivits". But the correct name is "stand". Trivits were used to hold hot cooking pots taken from the fire. Some trivits were actually used in the fire with the cooking pot placed on top.

Sleeve irons were a form of sadiron. Very elongated in shape to allow them to reach up into the cuff of a sleeve or to smooth deep ruffles. They also came with a choice of stationary or detachable handles.



Another special purpose iron was the fluting iron. It was used to press pleats and ruffles. The iron was rectangular in shape and corrugated in profile. It was heated and used with a corrugated base called a crimper. The material was placed on the base and pleats ironed into it when the corrugated ridges of the top piece meshed with the corrugations in the base piece.

Several types of fluting machines were also marketed. They were operated by a hand crank which moved the fabric between two revolving hollow corrugated rollers. These rollers were heated by hot slugs of metal which were inserted into them.

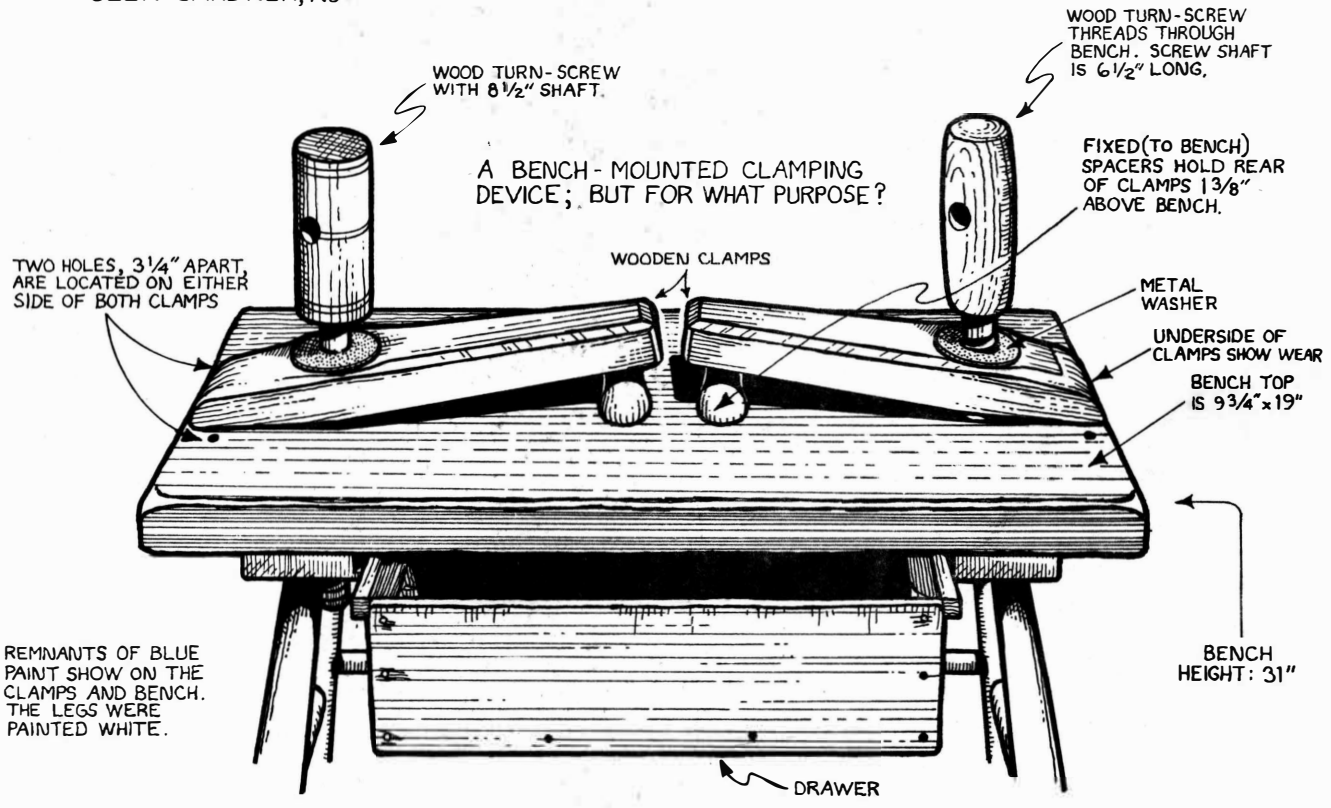
In 1896 electrically heated irons were introduced for home use. In 1904 GE produced an electric iron which weighed 8 pounds. The heat was controlled by plugging in and unplugging the iron. If too much heat was used the clothes were scorched. It took a nice judgement to use these irons. In 1913 the first iron with a built-in heel stand was introduced. This eliminated the need for a separate stand.

A thermostatically controlled electric iron was finally offered in 1928. Today's spray and steam versions are thermostatically controlled by dials marked for various kinds of fabrics and weigh only ounces. They are a far cry from the heavy sadirons of our grandmother's day. However today's modern version owes its predecessors acknowledgement for practical design and serviceability.

Pop Rivet's What's It? No. 6

by LARRY FUHRO

THANKS TO JOHN DEMPSEY, GLEN GARDNER, NJ



GADGETS · DOOHICKEYS · THINGAMAJIGS · AND WHATCHAMACALLITS

(Distaff, continued from page 9)
that right is right and left is wrong. That is also why lefthanders are sometimes looked down upon. And as a lefthander, I object.

"Done to a turn" comes from the days when a roasting string was used in front of the fireplace. A child would twist the string tight and then release it. The meat would rotate until the string unwound, and then it would be retwisted. This process would be continued over and over again until the meat was cooked—that is, until it was done to a turn.

"By and large," meaning generally speaking, was originally a term used in sailing. To some it meant to sail as close to the wind as possible; but to others it meant to sail slightly off the wind. Thus, "by and large" came to indicate an imprecise generality.

I do hope that you will not consider this column "a lick and a promise." This expression was common in England more than two centuries ago. It refers to a cat who gives a dirty face a fast lick, with a promise to finish the job later.

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