NEWS 181

September 2024

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Contents # NEWS 181 **September 2024**

Cover: Machine and Tool Blue Book. Hitchcock, USA, Vol.61 No.3, March 1966, p.279

TTTG President's Report

John Deeble

The year is whizzing by and the TTTG AGM is scheduled for the Tuesday October 8 Meeting. Please arrive early to be an active participant in the election process. Those interested in being part of the Committee need to return their signed nomination forms to our Secretary, John Bates by 1 October 2024. Please note that only paid up members are eligible to vote. The 2024-25 membership fees are now overdue for those who have not paid. Membership fees can be paid on the night.

August saw yet another successful Members and Friends Tool Sale with nine sellers offering 16 tables of tools. It was great to see two new sellers offering some different items. Thanks to all the sellers and buyers who support these smaller tool sales. Again, over fifty purchasers attended on the day. Many tables are already booked for the December 1 sale, so get in early if you wish to book a table.

My special thanks to Henry Black for his most informative presentation at the August Members Meeting on Wadkin Machinery in Australia. Henry has an encyclopaedic knowledge of this machinery and seems to know the location of many pieces of rare and unusual models. The range of historic catalogues on display were most interesting and a number of members expressed fond memories of using Wadkin machines in the past.

It was pleasing for TTTG to have recently had contact from an Auckland NZ based Tool Group. They identified an image on the TTTG website of a rare drill in a JD's article. John Daniel was happy to share the image, and we now have a link established with this group. We are most grateful to John for all his articles for NEWS over many years. Once again John has another article in this edition. His vintage tool restoration skills are without equal!

John Bates has recently circulated a number of opportunities for our members to attend tool related events. Thanks to Andrew O'Connor for details of the Clarendon Classic at Hawkesbury and the Campbelltown Steam and Machinery Museum. The other event is a visit to the HARS Museum at Albion Park. The opportunity to see behind the scenes at the museum is a rare opportunity. Thanks to Rick for offering this opportunity.

The 2025 SYDNEY TOOL SALE scheduled for Sunday 23 February 2025 at the Thornleigh, Brickpit Sports Stadium. Tables booked out very quickly for the 2024 sale so get in early and book your tables through the Secretary. Just email secretary@tttg.org.au for a booking form.

I look forward to catching up at the AGM, the December Tool Sale and Members' Meeting.

BAHCO "The Shifter": 1892-1983

John Bates

PREAMBLE

Let's start with a tribute; to Bruce (http://www.melbys.net/bahco/Generations.htm) whose forensic examination of BAHCO items in his collection made this article possible. Bruce's pages cover a lot more than just the BAHCO shifters, and I can recommend a visit. If you really want to deep dive then try the BAHCO Museum (https://bahcomuseum.se/historia/). Thanks also to Felix in Finland at https://skiftnyckeln.blogspot.com/.

Also a salute to Ron Geesin and his two volume set The Adjustable Spanner published by Crowood Press, Wiltshire in 2016 and 2022. These are glossy, coffee-table style hardcover books. Last, but not least Collecting Sidchrome Spanners: 1942-1991 self-published by Dick Lynch in Australia.

Yes there is a BAHCO connection to Sidchrome whose adjustable spanner was marketed from around 1954 and appeared in catalogues from 1958. The following historical information was kindly provided by John Hawking:

> *The original Sidchrome shifter (flute closed to the worm and open to the hanging hole) was probably made by Williams in the USA in the 1950's. Cyclone also made the Williams type, but probably in 1960's (can't find earlier listings).*
>
> *The next style of shifter has the flute open to the worm and closed to a raised ridged hanging hole and was probably made in Germany by Dowidat, as individual drop forged parts and shipped to Sidchrome for finishing. The MADE IN AUSTRALIA marked shifters could have been forged by Dowidat Coffey after they acquired their drop forges in 1967.*
>
> *Bahco definitely made the Sidchrome shifter in 1979, but would have been made a bit earlier, as they stopped importing from Japan after the mid 1970's.*

From the 1970s the 'Sidchrome' shifter was made by BAHCO in Sweden and shipped to Australia for finishing and assembly. However, the 'Sidchrome' BAHCO was not exactly the same as the original. Comparisons reveal that, when fully opened, the threaded section of

the sliding jaw of a ‘Sidchrome’ *forged steel* shifter projects a good ¼ inch more from the bottom of the wrench than does a genuine BAHCO.

Finally, this is no exhaustive study of the BAHCO shifter in all its intricacy and variety. That would be a mammoth undertaking. The aim was to explore particular ‘shifter’ issues outlined below.

INTRODUCTION

Why write an article on BAHCO shifters? Initially the main purpose was to explore two questions, both rather esoteric but not without historical interest and hopefully value.

The first question: did BAHCO invent the shifter? Here the term shifter is used to describe the screw adjustable wrench with one sliding and one fixed jaw, sometimes called the ‘Crescent wrench.’ In Australia it is often referred to as a "shifting spanner" or just a "shifter". The BAHCO patterned adjustable wrench became the dominant design throughout the 20th century and it remains so today.

The second question, and one which has proven to be a more difficult project: why were some BAHCO shifters forward opening, and others forward closing (author’s terminology) and when were these made? In BAHCO parlance this would be termed right-hand threaded (forward closing) adjusting screw and left-hand threaded (forward opening) adjusting screw, respectively. Forward closing or ‘right-hand’ is now the dominant shifter design across the world.

In 1886 Johan Petter Johansson established himself as an entrepreneur in Enköping, Sweden when he rented the smithy at Gustav Adolf's Plan, the park behind the current bus terminal in Enköping. The following year, he moved to Fanna, 3.5km from the center of Enköping, and founded the company, Enköpings Mekaniska Verkstad. Together with B A Hjorth, he laid the foundation for the company that the whole world would later know as BAHCO.

Johansson invented the adjustable pipe wrench, which he patented 17 August 1888. In the autumn of 1891 he received a patent for an adjustable wrench with two movable jaws. He developed this design by making one of the jaws fixed and adapted the design of the tool accordingly. The wrench, now definitively invented, was patented on 11 May 1892.

In 1892 Johansson gave his colleague Berndt August Hjorth the exclusive right to sell his adjustable spanners and pipe wrenches tools and together with Frans W Lindqvist's

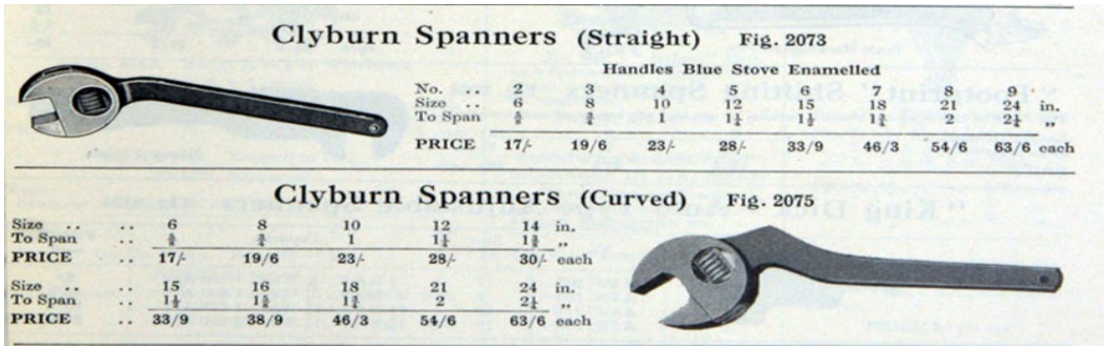
invention, the kerosene stove with the trademark "Primus". Both of these inventions were brought to the world market. In 1902 Enköpings Mekaniska Verkstads AB was formed. At that time B A Hjorth was the second largest shareholder in the company.

Enköpings Mekaniska Verkstad AB merged with A B Enköpings Maskinfabrik in 1914 and the company name became AB Enköpings Verkstäder with J P Johansson as its chief executive. Two years later, in 1916, the company was converted into a subsidiary under the sales firm B A Hjorth. JP handed over his company to his engineer son Hannes Brynge (1888 – 1972) and Berndt August Hjorth so that he could concentrate on his inventions eventually being granted 110 patents. He died in August 1943 and was buried at the Church of Our Lady cemetery in Enköping.

"THE SHIFTER" INVENTED

Now there have been a lot of 'adjustable' wrenches, so to be clear let's define the 'shifter' as an adjustable spanner with one fixed and one sliding jaw where the sliding jaw is moved using a thumbscrew.

Let's begin with Richard Clyburn (c.1797-1852) of Richard Clyburn and Co., England. He is credited with inventing the first screw adjustable spanner in 1842 and registered the design in 1843. His design remained in production mainly by other Birmingham makers and appeared in tool catalogues until about 1964 (see image below from Buck Catalogue, 1964).



Clyburn Spanners (Straight) Fig. 2073

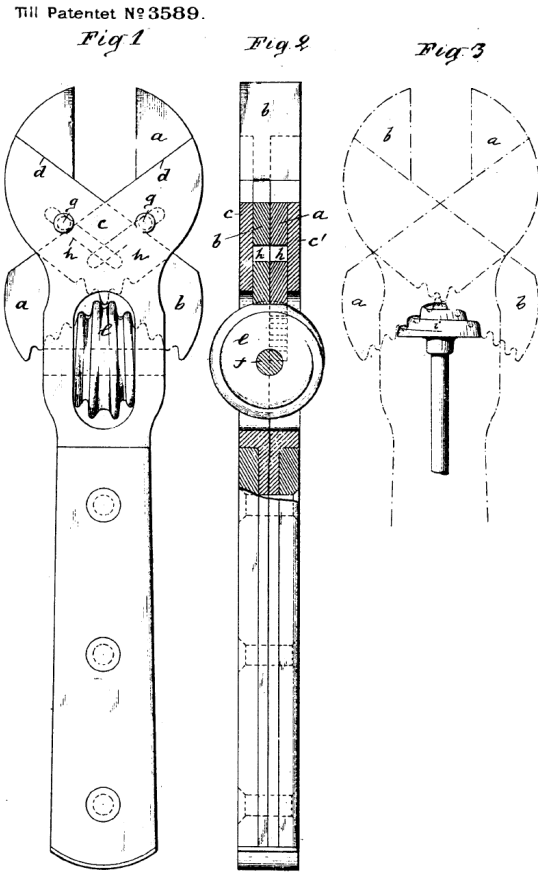
Handles Blue Stove Enamelled

No. ..	2	3	4	5	6	7	8	9
Size ..	6	8	10	12	15	18	21	24 in.
To Span	⅜	¾	1	1¼	1½	1¾	2	2¼ "
PRICE	17/-	19/6	23/-	28/-	33/9	46/3	54/6	63/6 each

Clyburn Spanners (Curved) Fig. 2075

Size	6	8	10	12	14	in.
To Span ..	⅜	¾	1	1¼	1½	"
PRICE ..	17/-	19/6	23/-	28/-	30/-	each
Size	15	16	18	21	24	in.
To Span ..	1½	1¾	1¾	2	2¼	"
PRICE ..	33/9	38/9	46/3	54/6	63/6	each

Almost 50 years later in 1892, the Enköpings Mekaniska Verkstad, Sweden (or the Enköping Mechanical Workshop, Sweden) owned by Johan Petter Johansson started producing screw adjustable spanners. In 1916 Johansson's colleague Berndt August Hjorth bought into Enköpings Mekaniska Verkstad and his initials gave rise to the brand name BAHCO.



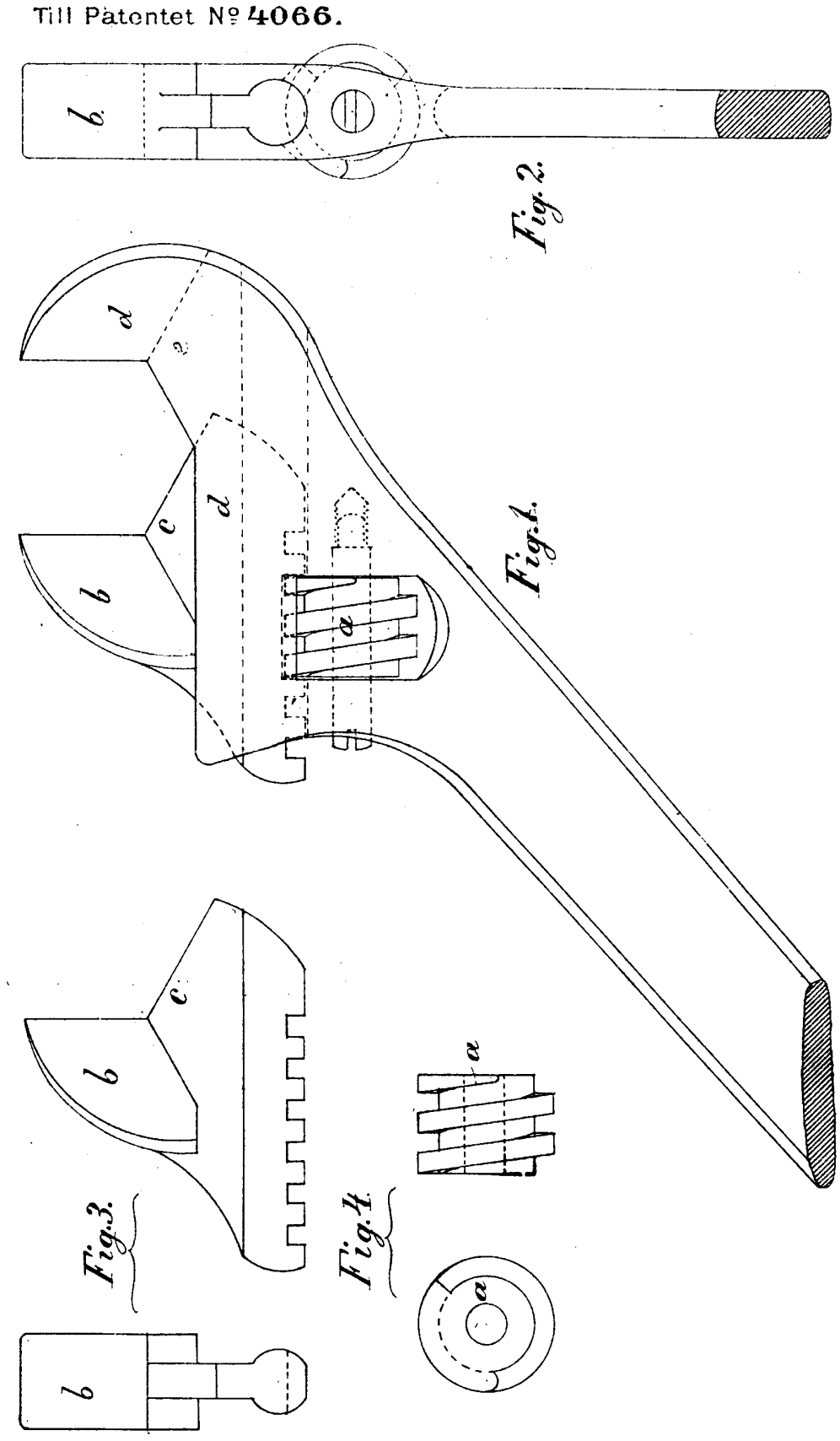
ABOVE: Swedish Patent No.3589 granted to J P Johansson on 24 November 1891

The company website asserts that BAHCO was the first to produce adjustable spanners, but this is not strictly correct. The very similar design introduced by Richard Clyburn in 1843 was first. Nevertheless, the Clyburn was destined to be overshadowed by the BAHCO shifter which, with a more effective use of material and better design, made it lighter and more convenient to use.

Clyburn's shifter was the first. Interestingly, BAHCO adjustable wrenches were exported to Britain from 1914 to 1924 and branded 'BAHCO-CLYBURN' as the company sought to gain a sales edge in the UK market.

Another contender for "first shifter" is the Crescent Tool Company of Jamestown, New York, USA. The company was founded by Karl Peterson in 1907. Peterson was an active inventor who had previously been associated with two other toolmakers in the Jamestown area, the J P Danielson Company and Wm. Hjorth & Company. Karl Peterson was granted US Patent No.1,133,236 for his 'wrench' on 23 March 1915 and assigned it to the Crescent Tool Company. Certainly, it was Crescent that introduced America's first open-end adjustable wrench. That adjustable wrench was extremely successful but too late to be a world first.

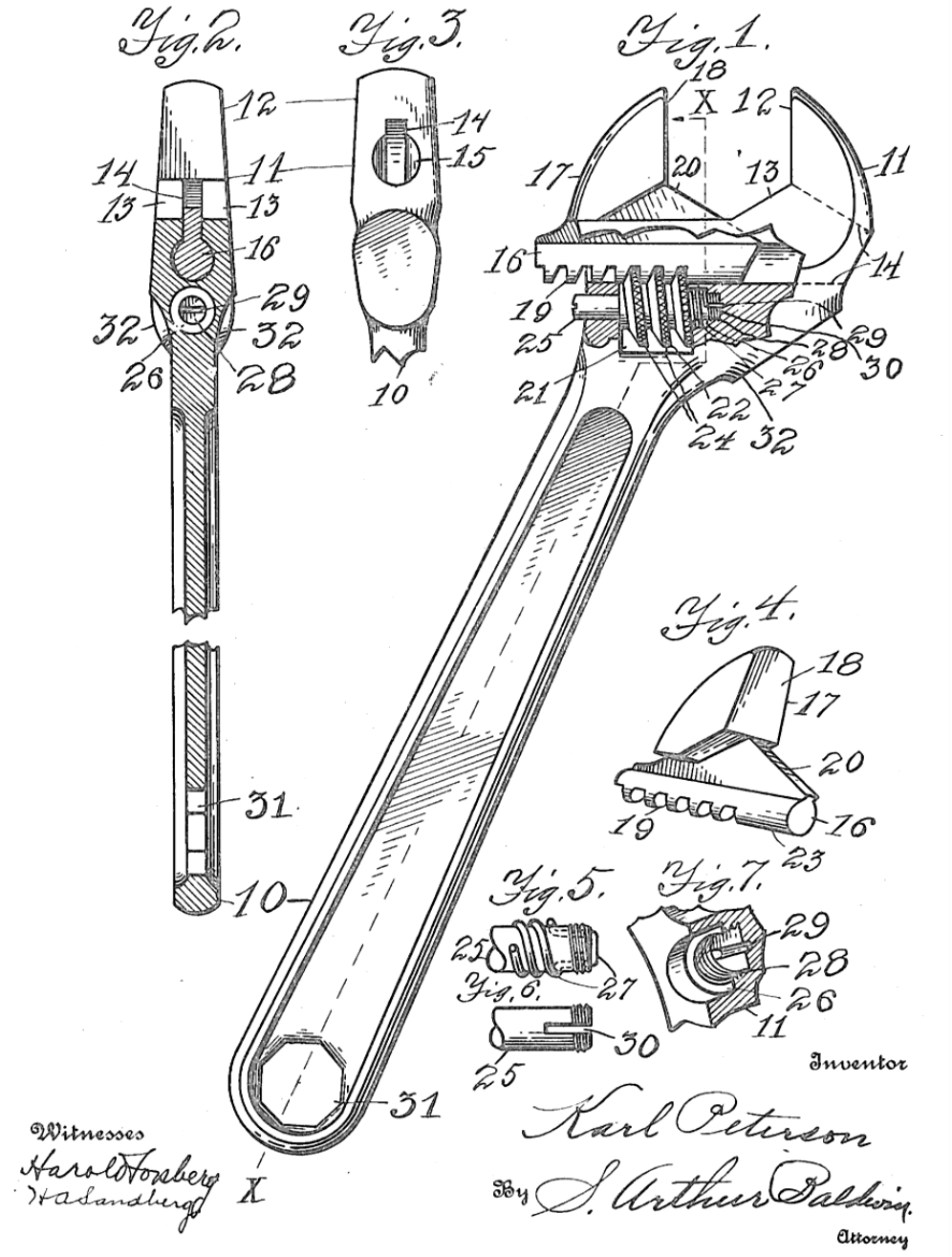
In 1892, the first line of shifting spanners produced at Enköpings Mekaniska Verkstad where designated Nos. 1, 2, 3, 4, 5 and 6. More information about each is in the table below. For some reason, the lengths varied. That first year, just 300 adjustable spanners were made, but by 1902, annual production had increased to 4,000. By 2024 BAHCO estimated that the company had produced approximately 100 million shifters in total.



ABOVE: J P Johansson Swedish Patent No. 4066 granted 11 May 1892

K. PETERSON.
WRENCH.
APPLICATION FILED JAN. 18, 1915.

1,133,236. Patented Mar. 23, 1915.



ABOVE: K Peterson's adjustable wrench - US Patent No.1,133,236 granted 23 March 1915

BAHCO: “The Shifter” EVOLVES

At left is a neat pictorial representation of the evolution of the ‘BAHCO’ adjustable wrench. From the top of the picture:

►1892 left-hand thread, and 45 degree head angle (Enköping Mekaniska Verkstad);

►1910 left-hand thread, new head angle 15 degrees and brand stamped on handle (BAHCO);

►1914 left-hand thread, rounder ‘dog bone’ grooved handle (BAHCO);

►1954 left-hand thread, taper handle and new taper jaws and hang hole (BAHCO);

►1984 first ‘ERGO’ model: left-hand thread, and grip scale etched on head (BAHCO);

► 1992 left-hand thread, and new ‘ERGO’ thermoplastic slip-free handle (BAHCO).

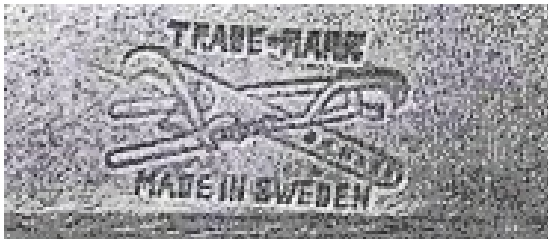
MODEL No.	CAPACITY (mm)	LENGTH (mm)	THREAD	HEAD ANGLE	PRODUCTION YEARS
1	20	150, 165 & 205	LH	45	1892-1915
2	25	230 & 255	LH	45	1892-1915
2A	32	305	LH	45	1903-1910
3	37	305 & 380	LH	45	1892-1915
4	45	385 & 455	LH	45	1892-1915
4A	51	560	LH	45	1903-1910
5	60	510 & 660	LH	45	1892-1915
6	75	615 & 760	LH	45	1892-1915

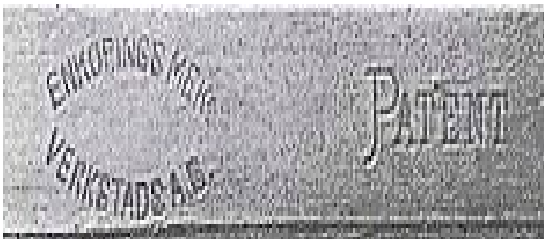
These first wrenches were hand forged with a smooth handle, slightly tapered and broader at the back end. The head angled at 45 degrees. Gripping surfaces were

hardened. The “set screw” or adjusting screw was left-handed. These were made until 1915 when they were re-designed, and production of Nos. 81 to 87 began.

Toward the end of the initial production run, possibly around 1914, the ‘BAHCO’ brand name (see below) appeared on the Model Nos.1 to 6 wrenches.

From 1903 the year after Enköping Mekaniska Verkstad was converted into a limited company (Enköpings Mekaniska Verkstads AB), the shape of the handle changed, so that it became narrower closer to the head and new company branding (see below), including a trade mark, was introduced.





LEFT-HAND vs RIGHT-HAND THREAD ADJUSTERS

An examination of the various makes of adjustable wrenches soon reveals an obvious left-hand vs right-hand thread divide. It is usually easy to spot the difference. Laid down with the head at left, the thread helix on the right-hand adjuster screws slopes ‘downhill’, while on the left-hand adjuster screw the thread helix slopes ‘uphill’.

BAHCO shifters have both, but in the BAHCO domain, left-hand (forward opening) was the norm. Interestingly, J P Johansson’s 1892 patent drawing shows the adjusting screw with a right-hand thread. Then again, Swedish Patent No.40417 granted to Hannes Brynge (J P Johansson’s son) in 1914 clearly shows the adjuster with a left-hand thread. Perhaps he was just tidying up his father’s slip of the pen.

Around 1910 Bahco was planning its expansion into the UK and subsequently to other nations where right-hand thread (forward closing) was normal. Perhaps BAHCO management thought it might be easier if they had right-handed versions for those markets. The logic may sound reasonable, but it is pure conjecture on the writer’s part.

In any event, from the first BAHCO shifter in 1892 right through to the 1980s, most (but certainly not all), the BAHCO shifters had left-hand adjusting screws such that turning the adjuster forward, from right to left, caused the sliding jaw to open. For example, wrenches Nos.51 to 58 were produced with right-hand threads on the screw. But wrenches Nos.61 to 68 were produced with left-hand threads. The Nos.60 to 68 series had the same grip capacity and lengths as models Nos.51 to 58.

MODEL No.	LENGTH (mm)	CAPACITY (mm)	THREAD	HEAD ANGLE	PRODUCTION YEARS
51	205	21	RH	15	1911-?
52	255	28	RH	15	1911-?
53	305	33	RH	15	1911-?
54	380	38	RH	15	1911-?
55	455	47	RH	15	1911-?
56	560	52	RH	15	1911-?
57	660	65	RH	15	1911-?
58	760	80	RH	15	1911-?

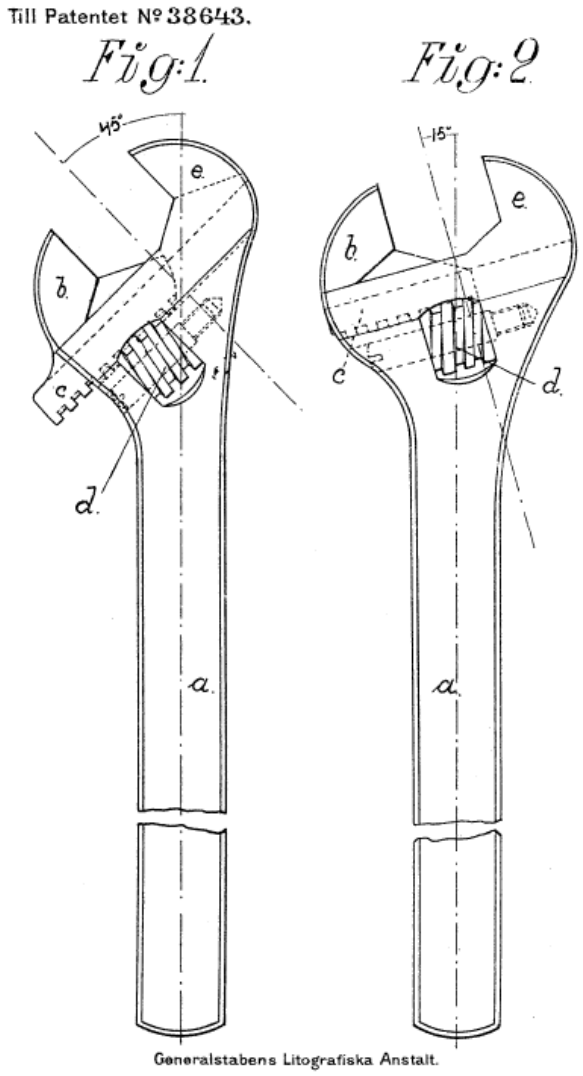
LEFT: Model Nos.51 to 53

MODEL No.	LENGTH (mm)	CAPACITY (mm)	THREAD	HEAD ANGLE	PRODUCTION YEARS
61	205	21	LH	15	1913-?
62	255	28	LH	15	1913-?
63	305	33	LH	15	1913-?
64	380	38	LH	15	1913-?
65	455	47	LH	15	1913-?
66	560	52	LH	15	1913-?
67	660	65	LH	15	1913-?
68	760	80	LH	15	1913-?

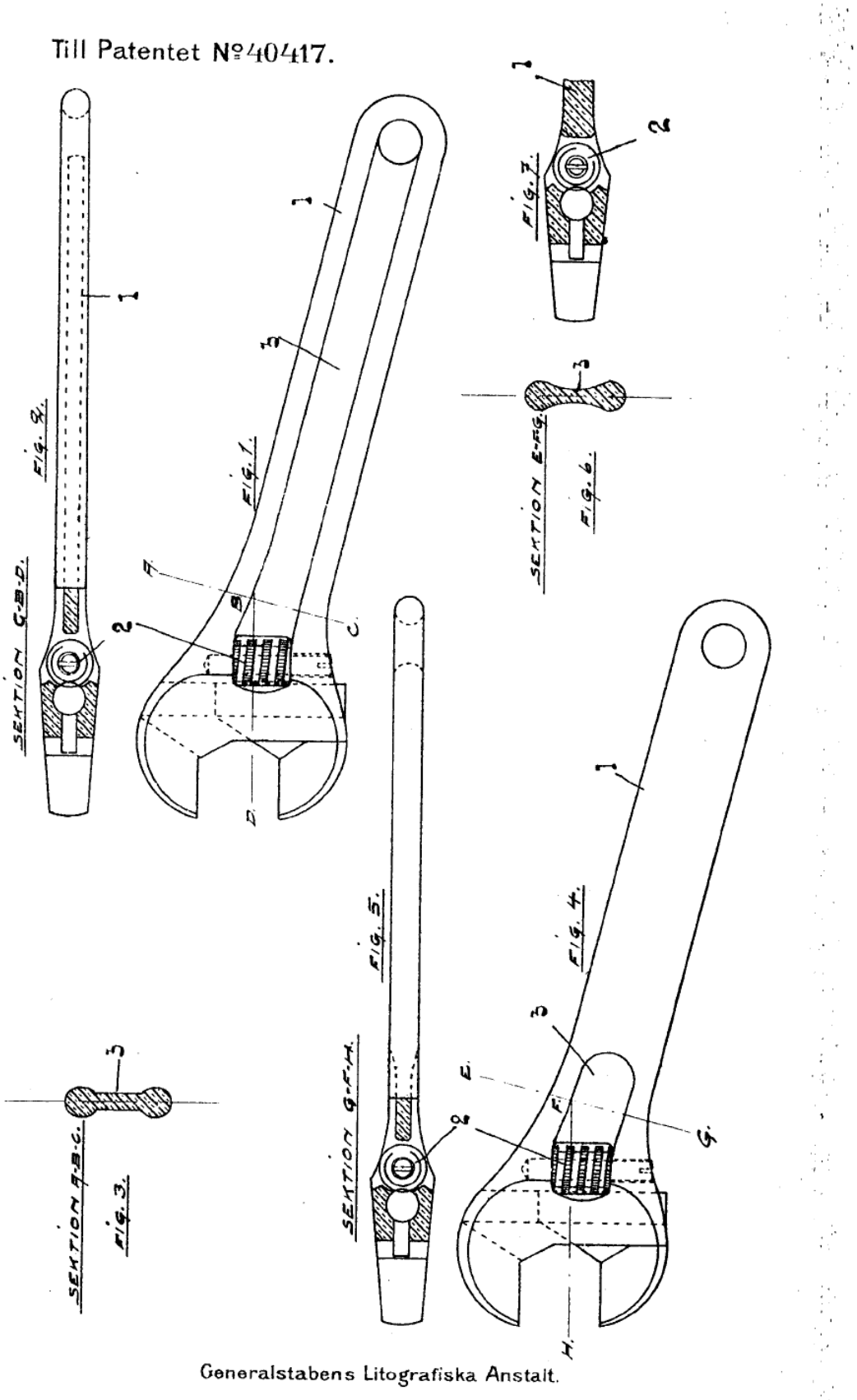
On 5 November 1913, the BAHCO board decided to prepare a wrench for export to England. Complaints about problems with the screw hole were also addressed in

the next generation of BAHCO shifters. On 21 December 1914 Hannes Brynge was granted Swedish Patent No.40417 (see below). The text "BAHCO-CLYBURN" and “Patent No.40417” were stamped on these wrenches from 1913 until 1924.

In March 1911, J P Johansson was granted Swedish Patent No.38643 for a wrench with a 15 degree angle between head and handle. This enabled the adjusting screw to be moved closer to the fixed jaw so the thread on the sliding jaw could be shortened to avoid it going outside the head when fully open. An additional advantage (not mentioned in the patent) is that the 15° angle requires the minimum wiggle room when handling a hex nut.



ABOVE: Swedish Patent No.38643 granted to J P Johansson on 21 March 1911



ABOVE: Swedish Patent No.40417 granted to Hannes Brynge on 21 December 1914

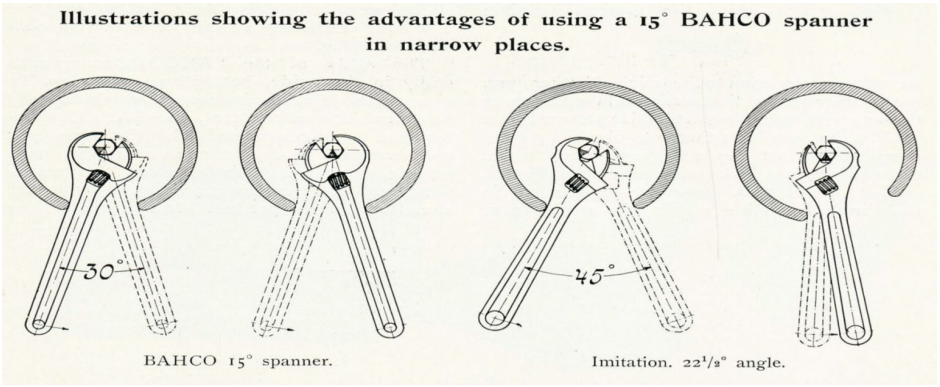
In October 1914, the 70 Series wrenches, models Nos.70 to 78, were introduced. With a few minor changes (such as a coil spring being introduced under one end of the adjusting screw), wrenches Nos.69 to 75 were produced by BAHCO through to 1969.

The 70 Series shifters had a 15-degree angle between the head and handle, a hang hole, a left-hand thread adjusting screw, tapered jaws and were fully hardened.

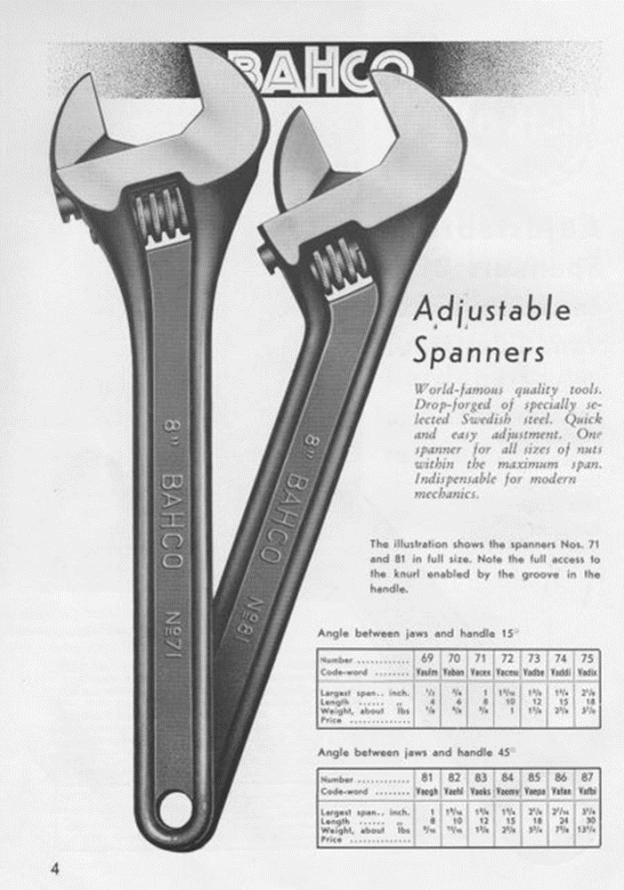
MODEL No.	LENGTH (INCHES)	CAPACITY (INCHES)	THREAD	HEAD ANGLE	PRODUCTION YEARS
69	4	½	LH	15	1910 to 1926 as No.29 then 1926 to1969
70	6	¾	LH	15	1914 to 1969
71	8	1	LH	15	1914 to 1969
72	10	1.1/8	LH	15	1914 to 1969
73	12	1.1/4	LH	15	1914 to 1969
74	15	1.5/8	LH	15	1914 to 1969
75	18	2	LH	15	1914 to 1969
76	-	-	-	-	NIL
77	-	-	-	-	NIL
78	-	-	-	-	NIL

Model No.69 was actually first produced in 1910 as Model No.29, but BAHCO changed it to No.69 in June 1926. Model Nos.76, 77 and 78 were never listed in the company catalogues and in all likelihood, they were never manufactured.

Repair parts for BAHCO ADJUSTABLE SPANNERS.
(Movable jaws, knurls and pins, for every size of spanner, on application.)



ABOVE: Images from BAHCO catalogue No.1602 (1926-1927)



The Series 80 wrenches were made from 1910 to the 1950s and featured a 45 degree angle between head and handle, Model Nos.81 to No.87. Opening capacity and length are identical to the Series 70. For example, No.72 specification for capacity and length are equivalent to the No.82.

Note that wrenches No.81 to No.87 have never been seen bearing the “BAHCO-CLYBURN” label.

By 1950, the largest sizes, No.86 and No.87, were manufactured with a smooth shank with the head and shaft being forged separately, and then welded together. Both these models, the 24 and 30 inch, are still available but the head angle is now 22.½ degrees rather than 45 degrees providing better accessibility and the adjusting screw is now right-hand turning or forward opening.

In 1924 the head, became narrower on both the Series 70 and Series 80 wrenches. Then, in the late 1940s, the manufacture of wrenches Nos.81 to 85 ceased.

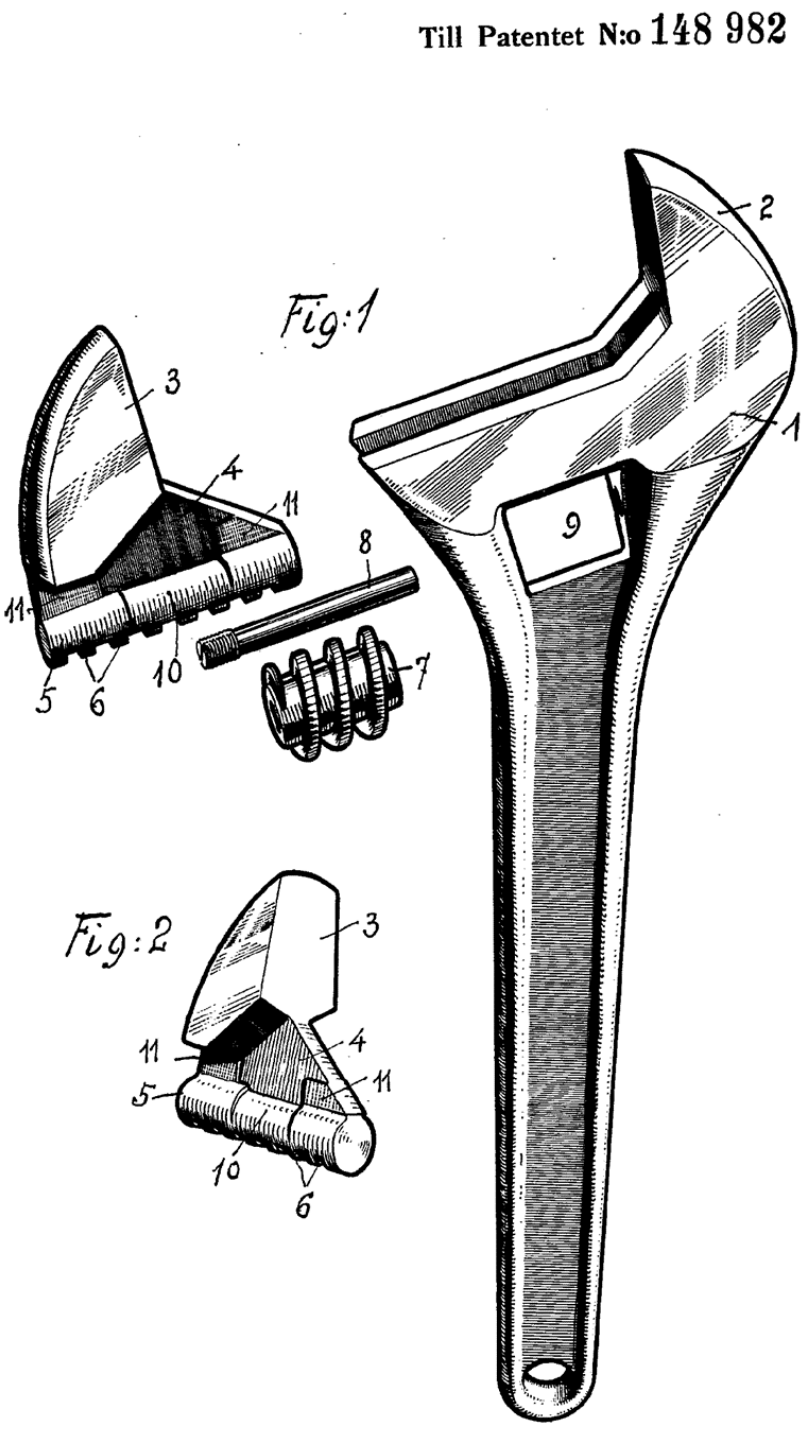
In 1954, the handle of the Series 70 wrenches was changed. The width of the shank edges was reduced while maintaining thickness. The brand was changed to AB BAHCO instead of AB BA HJORTH & Co. Production of the Series 70 wrenches ended in 1969.

BAHCO’s ‘fourth generation’ of shifters were manufactured for almost thirty years. Wrenches Nos.669 to 675 ran from 1954 to 1968 and wrenches Nos.0669 to 0675 from 1969 to 1983.

As a group these shifters typically had left-hand or forward closing threaded adjusting screws and longer, thinner tapering jaws than old 70 Series wrenches. They featured a tapered shank with a wider back end and suspension hole. Capacity and length was the

same as the 70 Series. They were available with either phosphate-coated (black) or chrome-plated finish.

On 9 December 1954, AB B A Hjorth & Co (P G Brynge) received Swedish Patent No.148982 for a new design of the runner. The threaded shaft of the sliding jaw is made with a reduced diameter in the centre. Previously, it was necessary to grind the sliding jaw after hardening to achieve a good running fit.



MODEL No.	LENGTH (inch)	CAPACITY (inch)	THREAD	HEAD ANGLE	PRODUCTION YEARS
669	4	½	LH	15	1954-1968
670	6	¾	LH	15	1954-1968
671	8	1	LH	15	1954-1968
672	10	1.1/8	LH	15	1954-1968
673	12	1.1/4	LH	15	1954-1968
674	15	1.5/8	LH	15	1954-1968
675	18	2	LH	15	1954-1968

BAHCO ceased production of Model Nos.669 to 675 in 1968. In 1969 Model Nos.0669 to 0675 entered the market. These had a tapered shank with a wider back end. a ‘hang’ hole, and a right-hand or forward opening threaded adjusting screw but otherwise were identical to Nos.669 to 675. Finish was either black phosphate-coated or chrome-plated. These ended their run in 1983.

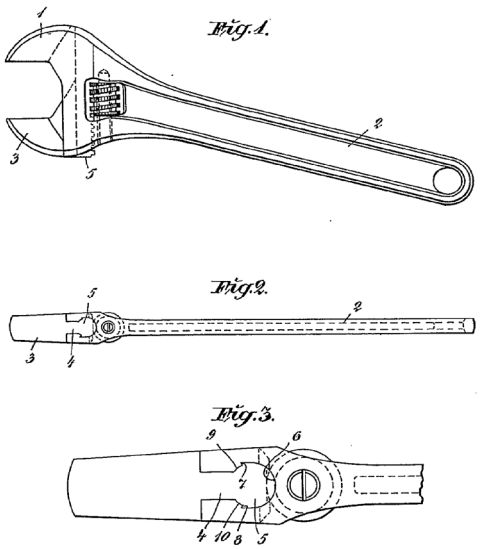
MODEL No.	LENGTH (inch)	CAPACITY (inch)	THREAD	HEAD ANGLE	PRODUCTION YEARS
0669	4	½	RH	15	1969-1983
0670	6	¾	RH	15	1969-1983
0671	8	1	RH	15	1969-1983
0672	10	1.1/8	RH	15	1969-1983
0673	12	1.1/4	RH	15	1969-1983
0674	15	1.5/8	RH	15	1969-1983
0675	18	2	RH	15	1969-1983

Wrenches Model Nos.969 to 975 were produced from1954 to 1968. These had a right-hand threaded screw, but otherwise, was identical to Model Nos.669 to 675. Model Nos.0969 to 0975 were produced from 1969 to 1983 in right-hand thread configuration.

MODEL No.	LENGTH (inch)	CAPACITY (inch)	THREAD	HEAD ANGLE	PRODUCTION YEARS
969	4	½	RH	15	1954-1968
970	6	¾	RH	15	1954-1968
971	8	1	RH	15	1954-1968
972	10	1.1/8	RH	15	1954-1968
973	12	1.1/4	RH	15	1954-1968
974	15	1.5/8	RH	15	1954-1968
975	18	2	RH	15	1954-1968

The ‘Polygon’ wrench, Model Nos. 469 to 473 were introduced in the late 1930s. The design was modern, the edges were blunter than before for better ergonomics. They were the precursors to the generation introduced in 1954, but they have also inspired later models. The models were introduced with right-hand thread adjusting screw, which at that time was unusual for BAHCO.

MODEL No.	LENGTH (mm)	CAPACITY (mm)	THREAD	HEAD ANGLE	PRODUCTION YEARS
469	110	13	RH	15	1930s-
470	155	19	RH	15	
471	205	26	RH	15	
472	255	30	RH	15	
473	305	43	RH	15	



LEFT: from Swedish Patent No.102165 granted to H Brynge on 21 May 1941

ABOVE: industrial art, the Series 900 – perhaps the pinnacle of the BAHCO 'shifter'

SOME CONCLUSIONS

BAHCO continues to make shifters, but our story ends in 1983. One year later the first 'ERGO' wrenches were produced. These wrenches were designated Series 8070 and covered Model Nos.8069 to 8075. Other versions followed.

Owners of pre-1984 BAHCO shifters then you should think carefully about hanging onto them. The ERGO was not a great leap forward, though it has produced some interesting variants with quirky and sometimes 'useful' features. Every BAHCO wrench was designed with ergonomics in mind, even before that term was invented.

BAHCO is now a brand of the SNA Europe Group, a leading European manufacturer of tools which in turn is owned by Snap-On in the USA. The factory in Enköping closed in 2007.

So BAHCO was not the first 'shifter', but it did develop the breed and distribute tools of quality to a grateful audience. The left-hand vs right-hand issue is less clear cut. Swedish preferences favoured the left-hand arrangement, and this was probably because the first BAHCO shifters were all left-hand adjustable, so the marketplace just accepted this as the norm.

Market perception and preference may well be the real answer. In the USA it was Crescent that popularised the adjustable wrench and its right-hand design has embedded a 'right is might' market mindset in American users. Plenty of online chats and blogs with a US slant air opinions ranging from users who do not care if their shifter has right or left adjuster to those who see a left-hand adjuster as un-American. The latter group seem to predominate.

BAHCO had already made the switch to right-hand when it launched into the English marketplace in 1914. But back home in Sweden the company continued to produce left-hand tools. Some years later a more decisive shift could be detected. In 1954 BAHCO manufactured Model Nos.969 to 975 with right-hand adjusters.

BAHCO also made shifters for Jaguar and Daimler car tool kits. These were all had right-hand threaded adjusters. However, the same shifters made for Volvo and Saab had left-hand threads.

Given the foregoing, the answer to left hand right hand BAHCO question looks to be heavily weighted to meeting market preferences in different countries. Therefore, the alternative explanation, that BAHCO made its shifters to suit people who were left and right handed, appears most unlikely.

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Channelock “Adjustables”

The Editor

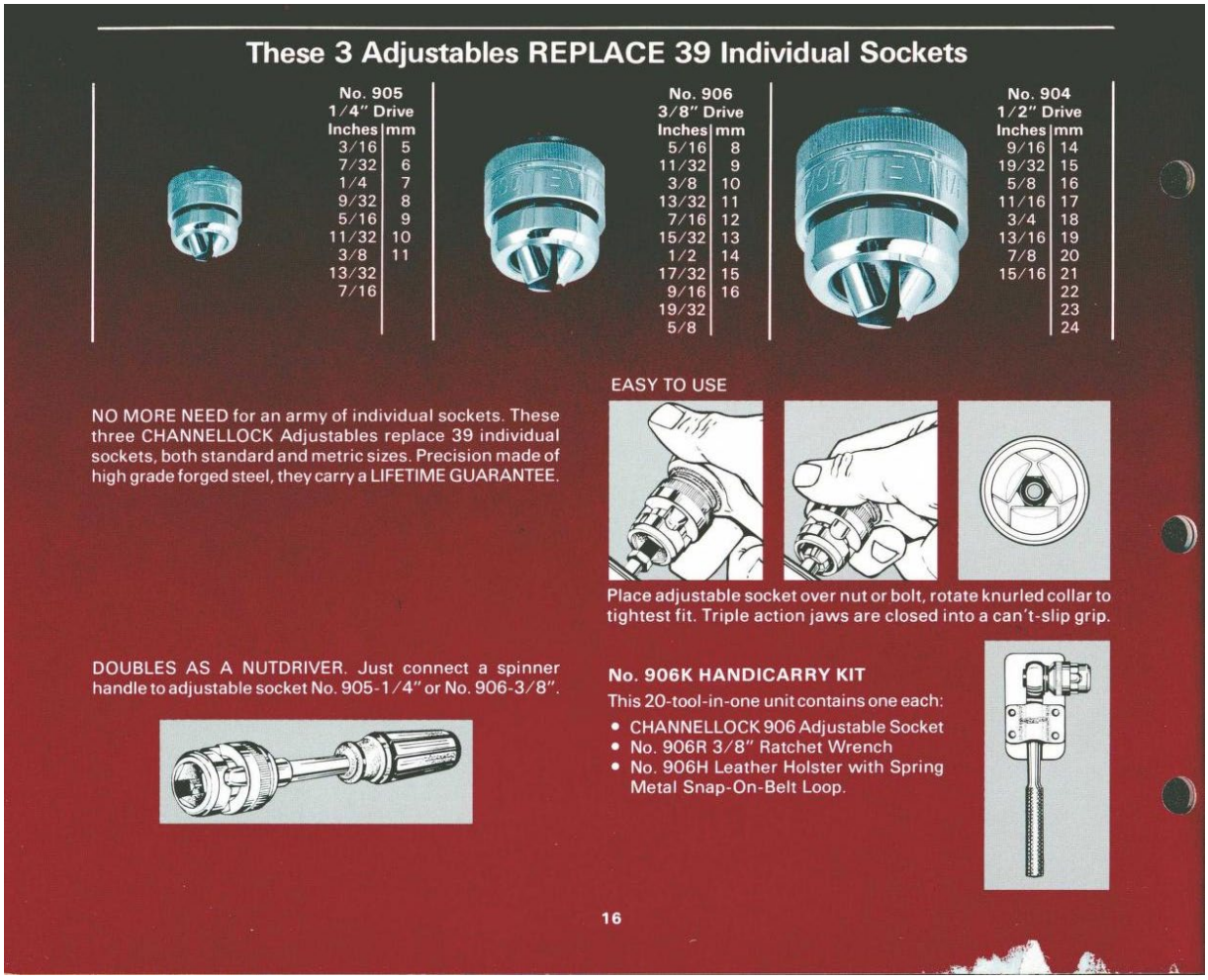
Another interesting find submitted by Jim Windschuttle. This time the ‘adjustable’ Channelock socket. Many of you may be familiar with this US brand. No doubt the inventor and manufacturer had high hopes for this nifty little tool, but its early promise was clearly not matched by sales and production ceased. Today it is an interesting tool oddity.

Channellock Adjustables was discontinued around 1997. The concept was fairly straightforward, an adjustable socket to replace many (39 in fact) fixed sockets ranging in size from 5/16” to 5/8". It is interesting to note that the “Adjustables were not made by Channellock but by Milbar which is a company in Chagrin Falls, Ohio, USA.

The pictures on the following page are of the No.906 “Adjustable” with a 3/8 inch drive. The manufacturer claims this tool will replace 22 single size sockets from 5/16 through to 5/8 inches AF or from 8 to 16mm if metric is your preference.

The image at left is a 1989 advertisement for Channellock adjustable sockets No.905 (1/4 in drive), 906 (3/8 in drive) and 904 (1/2in drive). The headline caption is 'These 3 Adjustables REPLACE 39 Individual Sockets'

The tool is beautifully made and silky smooth in operation with superb chrome plating. The images below show the ‘adjustable’ in fully closed (right) and fully open (left) position.



ABOVE: Channellock.756.Catalog. Channellock Inc., p.15

If you have a 'novel' tool why not tell us about it.

Send details to secretary@tttg.org.au

Another "New Rogers" treadle jig-saw story

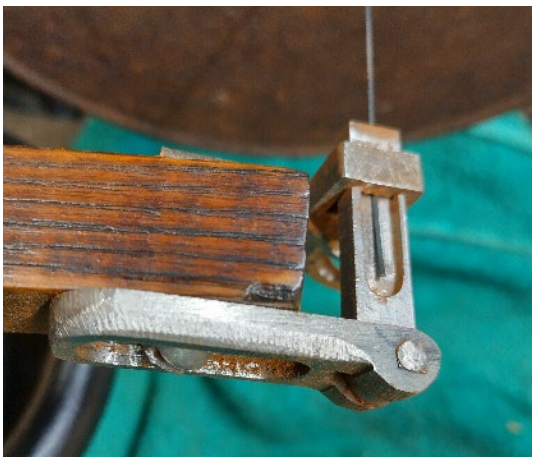
by Mike Williams

I was interested to read in the last issue, NEWS 180, John Daniel's tale of restoration of his "New Rogers" treadle jig saw and it reminded me of my own restoration of just such a machine.

In some measure my story is implicitly entwined with TTTG itself and started when TTTG used to meet at the Annie Wyatt Room of the National Trust. Our meetings usually ended with a fun auction of mostly donated items in order to raise funds for the Group. One of the last items to be auctioned was a "New Rogers", brought along by one of our members and was in a sorry state of repair. Half of one of the bow legs was missing, as was the lower blade clamp and many other small bits and pieces. However, the very delicate design of the cast iron frame was appealing to both my wife and I and she urged me to make a bid. Hell, it was just a fun auction in aid of the Groups finances and in no time, I owned the item for the princely sum of $20.

It then occupied a corner of my workshop for a number of years until I summoned enough enthusiasm to effect its restoration; the biggest challenge being to make a new half for the missing leg. I had an idea that I could take a length of thick-walled steel pipe and hacksaw it longitudinally, slightly tapering it as I went to make the requisite missing section. Several nights of hacksawing produced a length of steel of approximately the right cross section but of course it was straight and looked nothing like the delicately curved bow of the other original half.

Fortunately, I have a forge (not a big one, it is a hand-cranked farrier's shoeing forge but big enough for the job in hand) and by heating and bending sections of the hacksawed pipe I was able to make a new half leg which was a passable copy of the original. I now had a steel half leg and a cast iron stump but how to join them?



Fortunately, my project efforts had awakened enthusiasm with the late Barry Perdriau (TTTG member Number 12) who volunteered to try brazing the stump and new half leg together as well as joining the new half leg to the foot pedal. It wasn't an easy job as anyone who has tried to braze cast iron will attest but Barry persevered (without oxyacetylene) and the result was very creditable as you can see from the picture.

After much wire brushing I was able to de-rust the rest of the frame and paint it semi-gloss black. Using my trusty small Unimat lathe in its milling configuration, I milled a piece of mild steel into a lower blade clamp, using the upper clamp as a design model but without the blade tension release toggle.

The machine was now useable, and I used it to complete several small wood projects that had been waiting for a scroll/jig saw for some time. If I had any criticism it was the fact that it lacked momentum, probably because the flywheel was still missing and the emery grinding wheel had large sections missing which didn't help the rotating balance one bit. TTTG came to the fore again and a current member gave me both a flywheel and a much better emery wheel from bits and pieces of "New Rogers" machines he had collected together. The action of my machine is now much smoother with the increased rotating mass.

A last observation is the fact that John Daniel's blade guide seems to be much more sophisticated than mine, suggesting that mine is an earlier machine.

All in all, John's story, which prompted this story and the continued involvement of members of the Group in my project is what TTTG is all about; helping each other in our search and discovery of traditional tools and traditional methods of working.

The restored machine with a new half leg, lower blade clamp, emery wheel and fly wheel

JDs – Early 19th Century English Mortise Gauge As found

by John Daniel

It was found in a box of discarded ‘unsaleable tools’ out the back of an Antique shop; it had history written all over it with its battle scars, the attempts of repairs and the initials of the owner heavily punched on the side of the barrel of the cast brass stock, it needed to be taken out into the light for a closer scrutiny.

Dismissed in a box of discards in an Antique shop

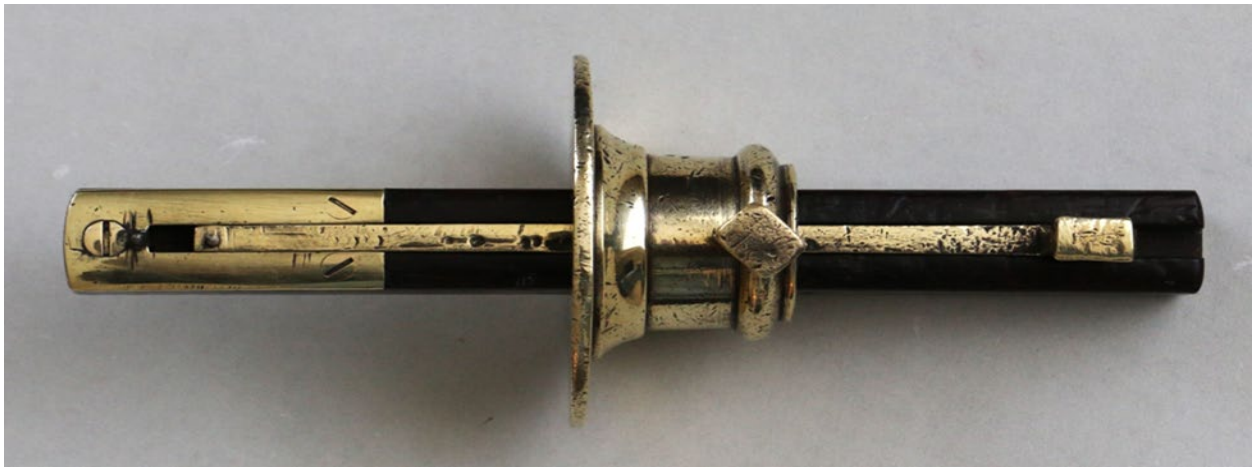
Well weathered and very tired

Every picture tells a story

At the top of the list of one's thoughts when stumbling on a relic such as this old mortice gauge in a box of old junk is, "how could a quality tool end its life in a junk box"? The second thought, "is it too-far gone or is there anything on it that can be salvaged"? predictably, it walked out of the shop; well, that was after I had parted with a couple of dollars.

Not a straight-forward challenge.

The length of the Ebony stem allowed the ends to be docked-off without compromising the function of the gauge. The brass wear-facing at the front end of the stem had enough length to remove the old, cracked screw holes, then relocate the two screws back to solid brass. The brass stock was functionally uncompromised, so just a sympathetic buffing and waxing to preserve some evidence of a hard life, and the roughly punched owner's initials, left to reveal something of the man who had so-permanently, 'branded' it.



Should it have been left as-is to be displayed with other relics? I think not; it has survived despite its abuse, a testament to design, choice of materials and integrity of the manufacturer, most likely William Marples, back in the1870's.

REFERENCES:

Some English Woodworking Tools, Ken Roberts, page 208

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Next Members & Friends Tool Sale

SUNDAY 01 DECEMBER 2024

Remember the time: **8.00 to 11.30 am**

Remember the location:

Old Eastwood Town Hall
74 Agincourt Road
Marsfield, NSW

Remember the entry fee:

- **$5 per person – pay at the door and please have your $5 note or $5 in coins for entry.**
- **All purchases are made in cash so having small notes and coins is a very good idea.**
- **PLEASE NOTE: THERE IS NO ATM AT THE VENUE**

TTTG Members, got surplus tools to sell? – then hire a table:

- **$25 per table – contact the Secretary to book via secretary@tttg.org.au**
- **For insurance reasons only TTTG Members can book tables – membership is only $50 per year**
- **TTTG runs 4 tools sales each year**

TABLES ARE LIMITED – SO DON'T DELAY!

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ASSISTANT PASSES 1 FOR EVERY EXTRA TABLE BOOKED

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KavTak.com.au, based in Glenwood, Sydney, NSW, are Garvin's exclusive Australian rep' and reseller.

The selection of tools that Garvin offer is vast, and therefore, at present it's not possible for KavTak Tools to offer the entire range - although they are always expanding their range based on customer demand.

If you can't find what your looking for online at KavTak Tools, then GarvinTools.com have online brochures, etc. Find what you need, let KavTak know and they can arrange to ship it on one of their annual visits. Or if it is urgent, air freight can be arranged.

Other Online Resources

Companies with good customer support are:

Machine Tools

machineryhouse.com.au

edisons.com.au

Tooling, Materials & Hardware

EdconSteel.com.au

aimsindustrial.com.au

boltandnut.com.au

Issue 01 - KavTak Tools - May, 2023

Finding the Balance

Time, Cost & Quality

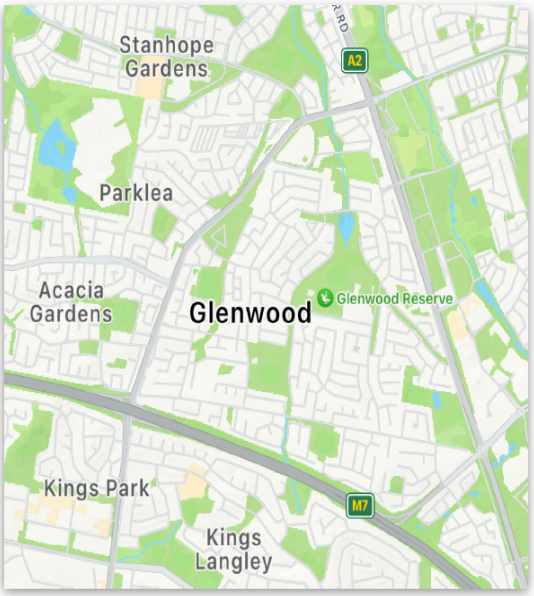
Makers are always trying to get the right balance in their own work, as well as when deciding to buy new gear, or indeed, restored gear, for their workshops.

The context at hand may sometimes require a trip to the hardware and a compromise with whatever the retailer has available at the time. But if there is enough time, waiting for local mail, or even shipping from overseas, is worth the wait.

Garvin Tools make quality products that are better priced in most cases than similar products that are made in Europe or North America.

KavTak are keen to make Garvin Tools available online to the Australian market, so check out:

kavtaktools.com.au



TTTG Fees and Contacts 2024/25

TTTG Fees:

Membership (July to June)	$50.00
'Real Skills' Workshop	$70.00
Members Meetings entry	$5.00
Members & Friends Tool Sales entry	$5.00

TTTG Contacts:

NEWS Magazine Editorial, Articles & Advertising:
John Bates secretary@tttg.org.au

Tools Sales and Table Bookings
John Bates secretary@tttg.org.au

TTTG Memberships:

John Bates secretary@tttg.org.au

TTTG Members Meeting & AUCTION

Old Eastwood Town Hall
74 Agincourt Road, Marsfield, NSW

Tuesday 08 October 2024 – 7.00 pm Annual General Meeting
7.30 pm Members Meeting & Auction

TTTG Mega Auction - surplus tools – bargains galore!
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For more details see the website **www.tttg.org.au**

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