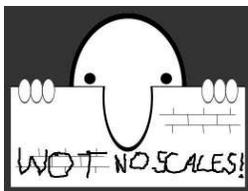


FULCRUM

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Back in the 1930s there was an American country music group called the Carter Family who sang songs of the depression and hard times that were then being inflicted upon the world by the financial crash. We can only be grateful that such a disaster couldn't happen these days. Having said that however, I have seen all those Fred and Ginger films from that era, where everybody is swanning about in top hats and feather boas, so do tend to wonder what all the fuss was about. The Carters' litany includes such jolly little numbers as 'Bury me Beneath the Willow', 'Lonesome Valley', 'Poor Little Orphaned Boy', 'Just Another Broken Heart' and, somewhat surprisingly, 'Keep on the Sunnyside'. One song in particular caught my attention. 'Reckless Motorman (engine driver)' features a railroad (railway) brakeman (?) who is (naturally) dying in a train wreck and gets to pass on a few words of wisdom before he goes. In particular, in verse six (yes! it is that long) he states;

**Go tell my father who is weighman
What he weighs to weigh it fair
There'll be no scales up in heaven
For that meeting in the air**
Now that really is depressing!

**Right. The Carter Family,
A.P, Sara and (front)
Maybelle (who later became
Johnny Cash's mother-in-
law)**



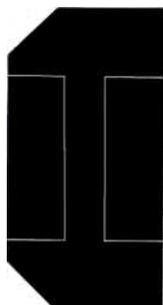
John Knights

Fearful Asymmetry (wonky weight)

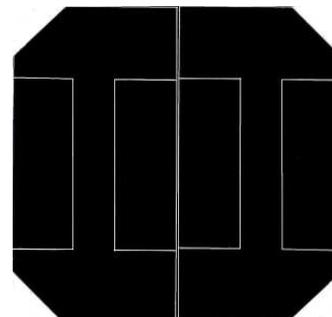
We tend to like symmetry and are programmed to recognise it! This is probably because it was once extremely advantageous so to do. When our ancestors were creeping through the primeval forest a flash of symmetry was an indication that there was something nearby that could be either lunch or a predator. Most architecture and craft styles tend to be pleasingly balanced. We did try the Rococo, which could be obstinately asymmetric, in the early 18th Century but in Britain at least, this style was soon replaced by the Neo-Classical that proved more durable. Equal armed Balances and Beamscales are symmetrical (ish) and this makes them aesthetically pleasing even to non-enthusiasts. Conversely, unequal devices, such as steelyards, are considered ugly by those who do not appreciate their latent charms (*'everything has its beauty but not everyone can see it'*. Confucius apparently!). The humble iron weight was normally made in a circular, rectangular or other form that has, in plan, at least two axes of reflection symmetry. A notable exception is the modern 25kg weight, as shown in (1). The form is described in the Regulations as an **irregular hexagon**. It is known as the 'coalman's weight' as it was shoehorned into the UK system, solely to allow coal to be readily bagged in the metric equivalent of the hundredweight. This weight is a bizarre confection, having, in plan, only one axis of reflection symmetry (2). The logic of course is to make it readily distinguishable from the 20kg. The 'metric hundredweight' is 50kg, so in normal use, two of these weights are placed side by side on the weights plate. The resulting shape is an irregular but symmetrical octagon (3), akin to the shape of the erstwhile imperial 'cental' series. If anyone has examples of wonky (or otherwise weird) weights, a picture would be nice.



1



2



3

'Break, break, break, On thy cold gray stones!'

(Another Scale Salesman's Tale, from Bob Myers) Within a few weeks of my having joined W & T Avery as a green, green, retail salesman in 1960, the Birmingham area decided to run a sales campaign on Coal Deadweights. As previously mentioned these were used by retail coal merchants and subject to regular loss when carried on and shed from the back of their lorries. At this time the company was marketing its new 3706 deadweight and we were given a pep talk about how superior this was over the other stuff that was out there. The new scale was in fact heralded as unbreakable. This seemed a slightly unrealistic claim to me. During a previous life in the Merchant Navy, I had discovered that most things can be broken if one tries hard enough, but as the newest recruit to the sales team I thought it wise to leave the thought unvoiced. With the Company sales hype ringing in my ears I rushed forth to load up the Hillman Husky and get out there to sell. My bit of Birmingham contained Tyseley coal wharf, a bunch of railway sidings with vast amounts of coal and coke. This seemed a good place to start. As I began my campaign, however, I became aware of something that had been glossed over during the pep talk namely; the new scale was approximately one third dearer than those of the opposition. This was clearly an issue when dealing with price conscious coalmen, who had no particular loyalty to the brand, so it soon became necessary to push the quality and start mentioning the magic word 'unbreakable'. This caused interest among the merchants and one potential customer asked if he could to be given a scale for 'inspection'. At the time he was standing on the back of his lorry, loaded two bags high. Perhaps unwisely, the scale was manhandled up. He briefly viewed the proffered machine and then, by way of scientific enquiry, raised it above his head and hurled it onto the concrete below. There was much amusement as I shovelled up the bits and assistance was cheerfully given to throw the largely disassembled device back into the Husky. Inevitably a debriefing session was held as the campaign had thus far resulted in no sales and one 'damaged' scale. The word 'broken' was not permitted but some clarification was provided. The 'unbreakable' bit was apparently the beam, a mighty sandwich of steel core sheathed in Mazak alloy, which was pretty much indestructible compared to the inferior welded steel offerings of the competition. The campaign was however suspended and we were sent off to sell scales to shopkeepers, who tended to be somewhat less physical with the equipment.

The 'unbreakable'
Avery 3706



Just for a change

Having devoted several issues to seaside postcards depicting fat ladies I thought it was time to show we are not averse to wheeling out any old stereotype including that of the mean Scotsman. **John Wintour**, to whom we are grateful, provided this card (right). I do recall, when



living in Skegness (England) in the early 1960s, myself and my decidedly non-Caledonian friends used to try the same stunt on the penny-in-the slot machines on the promenade. It was indeed possible, with care, to weigh more than one person by carefully building up the weight and working out individual values by subtraction. If the pointer moved backwards, at all, the locking device would operate and a new coin was required. Inspectors used the same trick when inspecting these machines so as to minimise the number of coins or tokens required to achieve a full load test (see left). **John Knights**.



John Doran Retiring.

John Doran has been curator of the Avery Historical Museum for the last seven years. He was appointed from his role as a Project

Engineer at Avery, knowing a lot about the history of Birmingham, but knowing very little about the history of scales. However, he rapidly became a well-informed metrologist, with a fine knowledge of the documents under his command.

His quick responses to queries, and his enthusiasm for learning, made him a valuable friend to many ISASC members. He was able to see the patterns of scale development, and Avery's role in that progress, and give excellent advice to collectors.

John always went that extra mile while he was curator, opening on his days off, arranging meals for people who had come a long way, ferrying people to the station, looking for material in locations outside the museum, and copying documents to help other people's research.

I personally feel a great sense of loss as John announced his retirement. I have benefited greatly from his generosity and enthusiasm, and I am very sorry he is going.

We all wish him a happy and rewarding retirement for many years to come.

Diana Crawforth-Hitchins

Isn't the Internet Wonderful?

Most collectors I know have taken to computers to help with their hobby. From cataloguing and image manipulation, to the economics of what you've paid and made on purchases and sales, tapping away on a keyboard seems to come quite easily.



Communication too has benefited. Although you can't beat receiving a handwritten letter from an old friend, Email in all its guises - online and via mobile technology - sure helps when you want to share information quickly and easily, like sending seven copies of your news or thoughts.

And getting on to the Web is much like having a vast library of books and resources in your own home, available at all hours. You might want to buy scales and weights or specialist cleaning equipment; or research the latest metal-detector finds reported to the Portable Antiquities database. EBay as a source of artefacts and market information has its critics, but it also has its amusing quirks, and the occasional "Eureka!" moment.

For historical research, if done properly, the Internet offers not just a source of trade directories, hard-to-find old textbooks and modern commentary, it can lead to publication at any one of a number of levels - from peer-reviewed electronic journals to comments on forums.

Since I've just assumed the mantle of ISASC(E) Webmaster, I'll be interested in the coming months in how Members can come together electronically to get more out of what we do. If you have any ideas, I'd be glad to hear from you. Emails (with ISASCE in the subject line) please to: qualia77A@hotmail.com.

Some websites you might like to try:

www.isasce.com / www.isasc.org / www.ebay.co.uk / www.finds.org.uk

www.geograph.org.uk - search on 'weigh' for pictures of scales too large to move! **Mike Sharpe.**

(On the minus side the internet also offers untrammelled access to pornography (so I'm told) and the ravings of disaffected lunatics. Editor)

Sad Ad

31/ LOCOMOTIVE WEIGHTABLES. A set of WT Avery locomotive weightables rescued from Ashford Works in the early 1980s has become available. These have been in the custody of the Bluebell Railway at Horsted Keynes for many years, although they belong in all probability to British Rail Engineering Ltd - now a subsidiary of BRB (Residuary) Ltd.
A set of scales would be placed under every locomotive driving wheel with the aim of achieving an identical weight on the track for each. There was typically 80T of kit in total, including a large amount of brickwork in the ground. There is probably 10T of above-ground kit at Horsted Keynes.
BRBR would be happy to donate the weightables to anyone who could make use of or display them.
Contact: Neil Butters, Heritage Officer, BRBR and Secretary, Railway Heritage Committee - thcommittee@aol.com 0117 372 8545."

The advertisement on the left was sent to Fulcrum by **Gordon Maslin**, who found us on the **ISASC (Europe)** web site. Gordon said '**Locomotive**

balancing tables are not common machines and as far as I am aware only three differing sets survive in this country. The Ashford (Kent) set mentioned in the advert was installed at the locomotive works sometime in the period 1899 to 1923 and appears to have the A742 automatic Quadrant indicating mechanism. The instruments are at serious risk of being scrapped and in need of a home.' He highlights a problem, which many of us have probably considered. Whilst small pieces of interesting equipment can be readily 'saved' by museums or individual collectors, there is a danger that the larger items, such as those described will end up being discarded. Gordon is an ex Pooley man so knows about these devices. If any members have any experience of such instruments or any ideas about a possible home for them, please get in touch.

If I didn't have a hammer! The extract, shown right, is taken from a 1958 booklet, issued by British Railways, called '**Instructions for the operation and maintenance of weighing machines and weighbridges**'. Whilst the need to advise against the use of weights as hammers may seem a tad superfluous experience would perhaps show otherwise.

It was not uncommon for an operative, faced with something that would not slide or turn as required, to reach for the nearest iron 7-pound to 'tickle' the recalcitrant component. The 7-pound was, apparently, the ideal malleiform weight. There is no metric equivalent (*another advantage of the imperial system perhaps?*).

4. Use, Inspection and Custody of Weights.

When machines have steelyards with loose weights care must be taken that each machine has its own weights, and no others.

Weights must not be used as hammers; they must only be used for the purpose provided. Each weight must be carefully examined daily and if the lead plug is found to be loose or missing a report must be made at once to the contractor's nearest depot and to the Regional Departmental Officer concerned, as follows:—

SUMMER MEETING

Owing to unforeseen circumstances the summer meeting had to be relocated to the Royal Arms at Sutton Cheney. This was a formal meeting, replacing the informal meeting normally held at this time at this location. The informal gathering had of course been held in April at a different venue, replacing the usual formal spring meeting (my head is beginning to hurt). From this inauspicious beginning however a most satisfactory occasion was achieved. There were excellent presentations, on and around the Non



Metropolitan theme set for the gathering. **David Apps** spoke entertainingly about his career in scrap metal, during which he was able to snatch many interesting weights from the mouth of the furnace, not to mention the odd golden guinea. **Norman Biggs** gave a scholarly and amusing oversight of the weights and scales of East Anglia, with suitable illustrations. Time constraints meant the Cambridge and Suffolk parts had to be curtailed but the section on Norfolk was presented in full. **Mike Sharpe** produced items and stories from his county of

Kent, which gave an illuminating overview of its metrological history. **Diana Crawforth-Hitchins** had assembled a typically impressive display of items by non-metropolitan makers (above) and spoke briefly but knowledgeably (of course) on the subject. Other members gave short presentations on items they had brought along which all added to the enjoyment. There were also excellent display and bourse stalls for members to poke around. Of particular note was the impressive display of rare Salter items by **Peter Elliott**. This may have been considered a little too metropolitan (I'm not too sure how 19th century West Bromwich stood in this spectrum) but it was a revelation to



Somewhat bizarre enamel sign (more a test piece perhaps?) acquired and displayed by Peter Elliott



many of us who may have

thought we knew something about the products of this famous business. The accommodation and food was excellent and the whole occasion was a credit to those who had had to quickly make the arrangements following the collapse of the original plans.

A nice shiny swan neck assay beam complete with bag of gold ore (genuine of course!)