# **ACCURATE WEIGHING NEWS**

Every Week for Every Body

## "CONTINUOUS WEIGHING NEWS" TO CREATE AN INTEREST AND AWARENESS AMONG THE PUBLIC

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PAGE: 1

In the previous weighing news, the necessity for the weighing and pricing scales and the invention of steelyard type pricing scale were described. The steelyard type pricing scale was non automatic and was therefore slow in use.

#### **Self- indicating Pricing Scales:**

It was soon followed by the Dayton automatic computing Scale with suspended pan.



The swinging pan was replaced by a goods fitting on a Roberval system. In 1907 Henry Pooley & Son Limited, by arrangement with the Dayton Computing Scale Company,

successfully submitted to the British Board of Trade, a scale of the type illustrated in the figure.



One of the chief modifications to this type was the introduction of a pendulum resistant unit in place of springs, by the Toledo Scale Company of U.S.A. Figure shows the first scale of pendulum type brought to England, sold through the agency of W.& T. Avery Limited.



These cylinder type of Scales usually had a capacity of twenty pounds, with a minor division on the chart of half – an – ounce. Since the Board of Trade Regulation required, on verification, an accuracy of a subdivision, the Scale should be accurate to 1 in 1280. Great skill and extreme accuracy in manufacturing made it possible for the commercial production of reliable scales to this standard.

### **Industrial Self – indicating Scales**

Many ideas for heavy capacity scales of the self-indicating type were tried and several of these became obsolete.

# ACCURATE WEIGHING NEWS

#### PAGE: 2

In the beautifully illustrated book "A Short History of Weighing" written by L.Sanders and published in 1947 by history employers W. & T. Avery Ltd., there is a reproduced page from a weighing machine catalogue issued by Henry & Son Ltd., in 1859 showing a spring dial platform scale in use in railway parcels office. Mr. Sanders said – and no one could speak with greater authority - that this was probably the first self-indicating platform scale used for industrial purposes.

Henry Pooley constructed Hydrostatic balances as early as 1874 and some remained in use for many years.



In 1907 Henry Pooley& Son Limited, introduced their "quadrant indicator" a massively constructed pendulous lever, carrying at one end a quadrant with a specially designed chart having an inclined vernier scale enabling small subdivisions of weight to be read. In the indicator shown in the figure, the chart and window are hidden behind uprights.

An important invention, known as the Aerostat, was made by Mr. Stickig at the beginning of the 20th century. This mechanism operated on a principle which formed the basis of many dial weighing machines.

The Aerostat mechanism was applied to platform Scales and weighbridges by W. & T. Avery Limited, in 1906.

In 1924, Avery introduced a semi – self-indicating platform scale which was marked with very small subdivisions of weight. Figure shows one variation of this model, the invention of C.Mc.G.Sykes. Essentially there was a steelyard with sliding poise for balancing the major units of load and a subsidiary pendulous resistant unit which gave automatic indication of the minor divisions.



Sharing the weighing news continuously,

