

THE USE AND CARE OF A BALANCE

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The Use and Care of a Balance by Peter J. Kraye

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PETER J. KRAYER

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OF A BALANCE**

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THE

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The Use and Care of a Balance.

A METHOD OF WEIGHING.

For accurate weighting it is customary to make a Balance oscillate four or five divisions on each side of the zero point. To do this the weigher is obliged to force an oscillation, by means of pushing in the pan arrest two or three times, or as often as necessary to create the necessary oscillation. As the rider is usually in use on the Beam it cannot be used for that purpose. With a container, such as a crucible or bulb that is first weighed, then charged and then weighed again, it is best on the first weighing to add, say one milligram by moving the rider, or make the balance swing out to the left five divisions and back to the zero point. On the second weighing do the same thing making it swing out to five divisions and back to the zero point. The weighing will be correct as the extra weight will be added to the crucible or bulb and not to the object weighed.

SETTING UP A BALANCE.

When a balance has been unpacked and is ready for setting up, clean the balance case, pillar, beam and stirrups. Screw the index tightly upon the beam, using a pin on indexes having a hole drilled in the upper part for

that purpose, until the screw on the little adjusting weight upon the index is directly in front. Then place the beam into its position by placing the socket on the beam onto the ball on the beam support, at the same time lowering the beam supports about half way. Then swing the beam on the socket until the bearing on the other side comes directly over the point. Raise the beam support and bring the beam into its proper position.

The stirrups are marked with one dot (') or two dots (''), as are the beam supports. They should be placed upon their supports according to these marks. Care should be taken that all marks come to the front. The bow wires or pans are marked (') or (''), or the pans are stamped "L" or "R" for left and right respectively. In placing the pans upon the hooks of the stirrups care should be taken at all times to have the marks to the front, or the letters so that they can be read correctly from the front.

This point may seem insignificant, but as a matter of fact it is very important. When bows are placed upon the balance with the marks to the rear or the letters in a position to be read backwards they are not the same position in which they were when the balance was finally adjusted by the manufacturer. This reversal of the bows from their correct positions, often throws them out of