70. A dead-weight machine shall-

- (a.) Have centres with rectangular shoulders fitted into rectangular holes, and firmly secured:
- (b.) Have the bearing-surfaces and points of contact of all legs, stays, hooks, and loops of hard steel:
- (c.) Have the bearing-surfaces of the adjustable slides of hard steel, and the stems holding them in position secured by lock-nuts or other suitable method:

(d.) Have metal or hardwood platforms:

(e.) Have the goods-platform not longer than the length of the beam (measured between extreme bearing surfaces) and not wider than double the width of the beam (folding wings shall not increase the length or width more than one-third):

(f.) When of the vibrating type, have a minimum fall of  $\frac{5}{8}$  in. both ways, and when of the accelerating type  $\frac{7}{8}$  in. one way:

(g.) Have any loose adjustment enclosed in a balancing-box permanently fixed beneath one platform; the weight of any such loose adjustment shall not exceed  $\frac{3}{4}$  per cent. of the capacity of the machine:

(h.) Have the stamping-plug placed in a conspicuous part of the beam or body.

71. The errors permissible on verification of dead-weight machines shall be as specified in Table 12 for platform machines.

## Platform Weighing-machines and Weighbridges.

72. Platform weighing-machines of the type known as the "Union" scale shall not be taken into use after a period of twelve months from the date of these regulations: Provided that such machines as are in use prior to the expiration of such twelve months may be used for five years thereafter.

73. A platform weighing-machine or weighbridge shall—

- (a.) Have its various parts of sufficient strength and rigidity to carry the full load without undue deflection:
- (b.) Have sufficient clearance between the platform and frame to allow for expansion due to weather effects:
- (c.) Be provided with a suitable steelyard guide or carrier to indicate the position of equilibrium:
- (d.) Have a balancing arrangement for daily wear-and-tear with a range not exceeding  $\frac{1}{2}$  per cent. of the capacity of the machine and not less than  $\frac{1}{8}$  per cent. each way:
- (e.) In any machine brought into use after the date of these regulations have such balancing arrangement securely attached and actuated by a detachable key:
- (f.) Have any pendulous lever, suspension-rod, water-box, or dash-pot suitably enclosed:

(g.) If provided with relieving gear—

(i.) Not exceed the prescribed limits of error in excess or deficiency when loaded and put steadily out of and into gear;

(ii.) Have the platform entirely disengaged from its bearings when in relief:

(h.) Have the stamping-plug fixed in the steelyard or dial.

- 74. The steelyard of a platform weighing-machine or weighbridge shall—
  - (a.) Not have any readily removable parts except the support for the counterpoise:
  - (b.) Have a minimum travel within its guide in conformity with the following table:—

Length of Steelyard.			Vibrating Machines: Travel each Way.	Accelerating Machines: Travel one Way.
Under 12 in.			0·25 in.	0.5 in.
Above 12 in to 24 i	in	1	0.4 in.	0.7 in.
Above 24 in.		• •	0.6 in.	0.8 in.

<sup>&</sup>quot;Length of steelyard" means distance from fulcrum to guide.

(c.) When notched, be of suitably hard metal, or have a band of such metal inlaid sufficient to bear the notches:

(d.) Have not more than sixteen graduations per inch in a platform weighing-machine, and not more than eight graduations per inch in a weighbridge, unless of a type approved by the Chief Inspector:

Provided that this clause shall not apply to instruments in use prior to the date of the regulations.

75. Weighbridges and dormant platform machines shall be verified and stamped in situ, in addition to any preliminary test on the maker's premises.

76. If a movable hutch, barrow, frame, or bucket is used instead of the ordinary platform it shall form an essential part of the machine, without which it cannot be balanced.