



TRADE AND COMMERCE
CANADA

SD-WA.246

STANDARDS DIVISION

OTTAWA, December 27, 1955

RESTRICTED APPROVAL LISTING

Conveyor scale (Merrick weightometer) - Manufactured by
Merrick Scale Manufacturing Company, Passaic, N.J., U.S.A.

Under the provisions of the Weights and Measures Act, Chapter 292, R.S.C. 1952, and Regulations thereunder (P.C. 6894), the apparatus specified and illustrated herein has been listed as an approved device for restricted use and may be used in Canada in accordance with the conditions applicable.

Apparatus Listed: Conveyor scale for weighing material conveyed by a belt supported on rollers, Merrick weightometer, Model E.

Rating of Apparatus: The capacity in pounds or tons per hour varies greatly, depending on the requirements for which the scale is built. Normal operating load should not be less than 50% of the manufacturers rated capacity and preferably should approach 75% of the rated capacity.

Application: Bulk weighing of crude or cheap material such as crude ore, salt, fertilizer, lime, cement and similar products.

Conditions: As prescribed in P.C.6894. It should be noted that these devices are required to bear a permanently affixed plate bearing the words:

Restricted - Trade and Commerce

or the mark

Restricted - T & C

Description: This device is a conveyor scale designed to perform the function of multiplying the speed of the conveyor belt by the varying load and totalizing these products in pounds or tons. The speed of the conveyor belt is transmitted to the integrator belt by means of sprockets, a chain, gears and shafts. The weight of the load on the weighing span of the scale is transmitted through two T type end levers to a beam. A steel float is suspended from the end of the beam and is partially raised out of a mercury filled cup when load is applied to the scale weight span and its upward movement is proportional to the load. The beam transmits its movement by a link to the integrating disc, tilting it in proportion to the load. An endless belt in the horizontal plane in contact

- 2 -

with the rollers of this disc transmits the proportional speed of the belt to the integrating disc. The weight is indicated on a totalizer counter. When the integrating disc is not tilted by a load the axis of the disc rollers should be at right angles to the horizontal plane of the integrator belt. This is the position for zero load and the totalizer should not register when the conveyor belt is operated without load. The weigh span section of the conveyor belt on rollers is suspended from the overhead levers.

Testing: The standard tests for a conveyor scale shall apply.

C.S. Phillips
C.S. Phillips,
Assistant Director (W&M),
Standards Division.

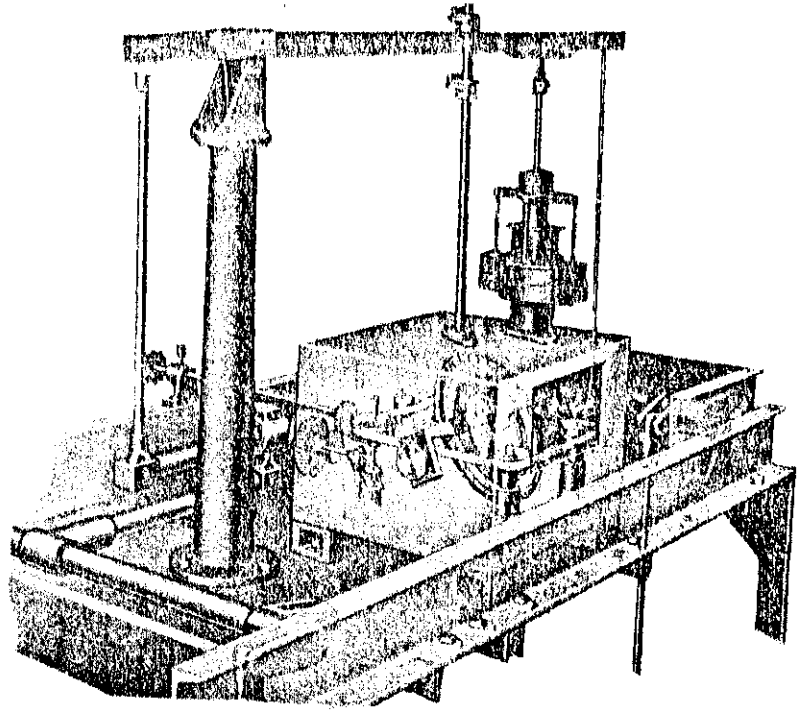
R.W. MacLean
R.W. MacLean,
Director,
Standards Division.

Reference: A-363

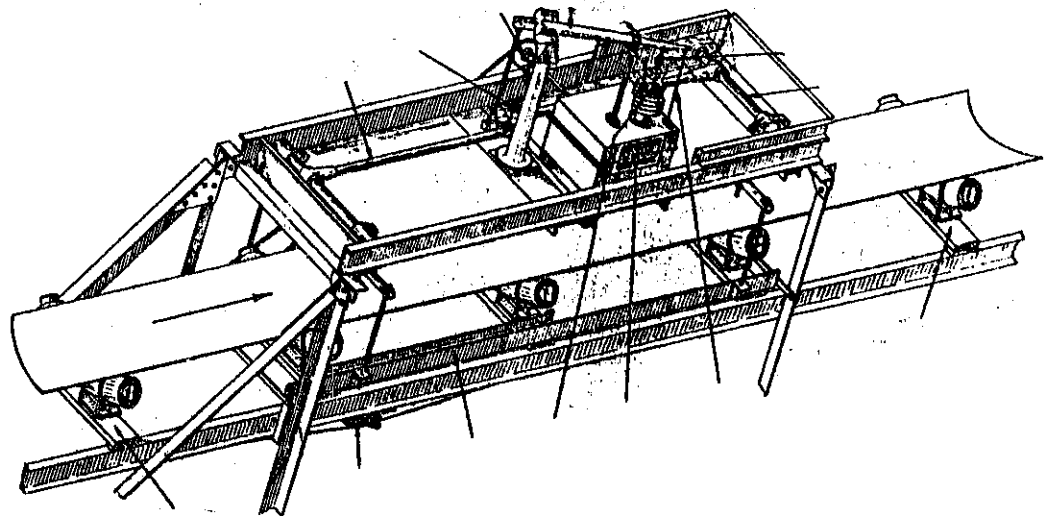
MODEL E WEIGHTOMETER

Integrating and registering head with levers and beam

SD-WA.246



Weightometer and Conveyor Belt.



(

(