Correspondence: Executive Officer
P.O. Box 282 NORTH RYDE
N.S.W. 2113
Telegrams: NATSTANCOM SYDNEY
Telephone: 888 3922

CERTIFICATE OF APPROVAL No 6/18/5

This is to certify that the patterns of the

Mercury (Overhead-track) Weighing Instrument with Model 211DA Headwork

submitted by Mercury Scale Co. Pty Ltd,
32 Dew Street,
Thebarton, South Australia, 5031,

have been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade.

Date of Approval: 9 November 1977

The patterns are described in Technical Schedule No 6/18/5, and in drawings and specifications lodged with the Commission.

The approval is subject to review on or after 1 December 1978.

All instruments conforming to this approval shall be marked with the approval number "NSC No 6/18/5".

Signed

Acting Executive Officer

22/12/77

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/18/5

Pattern: Mercury (Overhead-track) Weighing Instrument with Model 211DA Headwork

Submittor: Mercury Scale Co. Pty Ltd,
32 Dew Street,
Thebarton, South Australia, 5031.

Date of Approval: 9 November 1977

All instruments conforming to this approval shall be marked "NSC No 6/18/5".

Description:

The pattern (see Figure 1) is a self-indicating weighing instrument. It comprises an overhead-track lever mechanism (see Figure 2) and a headwork with a spring-resistant mechanism (see Figure 3).

The headwork comprises:

1. Headwork cabinet installed in a fixed position.

2. Main headwork lever — first-order lever, fitted with a dashpot, transfers the load to the resistant mechanism (see Figure 4).

3. Spring-resistant mechanism — suspended from adjustable levers which pivot, allowing the zero adjuster to increase or decrease the force on the resistant mechanism (see Figure 4). A spring-loaded rack drives the indicator over a weight reading face marked with 500 graduations.

   The basework, which is approved for loads up to 250 kg (see Figures 2 and 5), comprises a live weighing rail of up to 1,3 metres in length attached to a yoke at each end and suspended from two main levers which are in turn supported on a fixed frame. The live rail is aligned with the fixed rails by two links at each end of the live rail. A link connects the two main levers together and a second link connects the

end of one main lever to a transfer lever.

The weight reading face is marked, for example:

(III)

Max	=	250 kg
Min	=	25 kg
d = e	=	0,5 kg

The approval includes:

1. The weight reading face on both sides of the instrument.

2. The main lever being a second or third-order lever and arranged so that the force on the pullrod is downward.

3. Other Commission-approved baseworks replacing the basework described in the pattern, provided that -

   (a) the basework is of an instrument conventionally known as a platform weighing machine, weighbridge or hopper scale, etc., where the headwork and basework are separate assemblies connected by a mechanical linkage;

   (b) the capacity of the instrument is not more than the capacity approved for the basework;

   (c) a levelling device and an indicator are fitted, except for instruments installed in a fixed position, or instruments which satisfy the following accuracy requirements and indication limits when tilted to a slope of 1 in 20 in any direction.

Accuracy Requirements

± 0,5e for loads between zero and 500e inclusive.

Indication Limits

(i) Tilting at no-load — the zero indication does not vary more than 2e when tilted to a slope of 1 in 20, the zero being first adjusted in the reference (level) position; and

(ii) Tilting when loaded — the indication does not vary

more than e when tilted to a slope of 1 in 20, the indication at zero being adjusted in the reference position before tilting and in the tilted position before reloading;

(d) the instrument is marked:

"Approval Numbers

Headwork NSC No 6/18/5
Basework NSC No ....."

25/3/88

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

VARIOUS CERTIFICATES OF APPROVAL

The following changes are made to the approval documentation for the approvals listed overleaf

submitted by Mercury Weighing and Control Systems Pty Ltd
32 Dew Street
Thebarton SA 5031.

In the Certificates and Technical Schedules listed, the following changes should be made:

1) The submittor should be changed to read;

A & D Mercury Pty Ltd

(the address remains unchanged)

2) Any Mercury instrument or component of an instrument approved in the documentation, may now also be known as "AND Mercury" or similar.

Signed

J. Birch.

Executive Director

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APPROVAL	PATTERN
TYPE: weighing instruments counter scales	
6/3/007	Model 92
6/3/008	Model 131
TYPE: counter machines semi-self-indicating	
6/4A/012	Model 304A
TYPE: counter machines freely-suspended < 30 kg (spring scales)	
6/5/011	Model 211 DA
TYPE: weighing instruments non-self-indicating	
6/9A/001	Models 692 and 682
6/9A/004	Model 522D
6/9A/007	Model 211
6/9A/008	Model 600
TYPE: weighing instruments self-indicating	
6/9C/005	Model 211D
6/9C/013	Up to 2500 lb or 1200 kg
6/9C/066	Model 522 AL
6/9C/067	Model SM100/479/522D
6/9C/081	Model SB-LP 1200
6/9C/088	Model 522D LT-10K
TYPE: weighbridges self-indicating	
6/10B/040	Model WB-LT
6/10B/045A	Model RVB-H20
TYPE: automatic weighing instruments (except belt conveyors)	
6/14B/012	Model HSD automatic hopper
TYPE: overhead weighing instrument (suspended load or receptor)	
6/18/005	With 211DA headwork
6/18/017	Model OHT 500
TYPE: digital indicators	
S114	Model 579
S128	Model 1300
S132	Model 900
S161	Model AD4316
S199	Model AD-4321
TYPE: load cells	
S117	Interface model SM25-12 kg
S163	Transducers model B5112.1K
S221	HBM model TRT-50 (Mercury model TRT3K-50)

FIGURE 6/18/5 - 1

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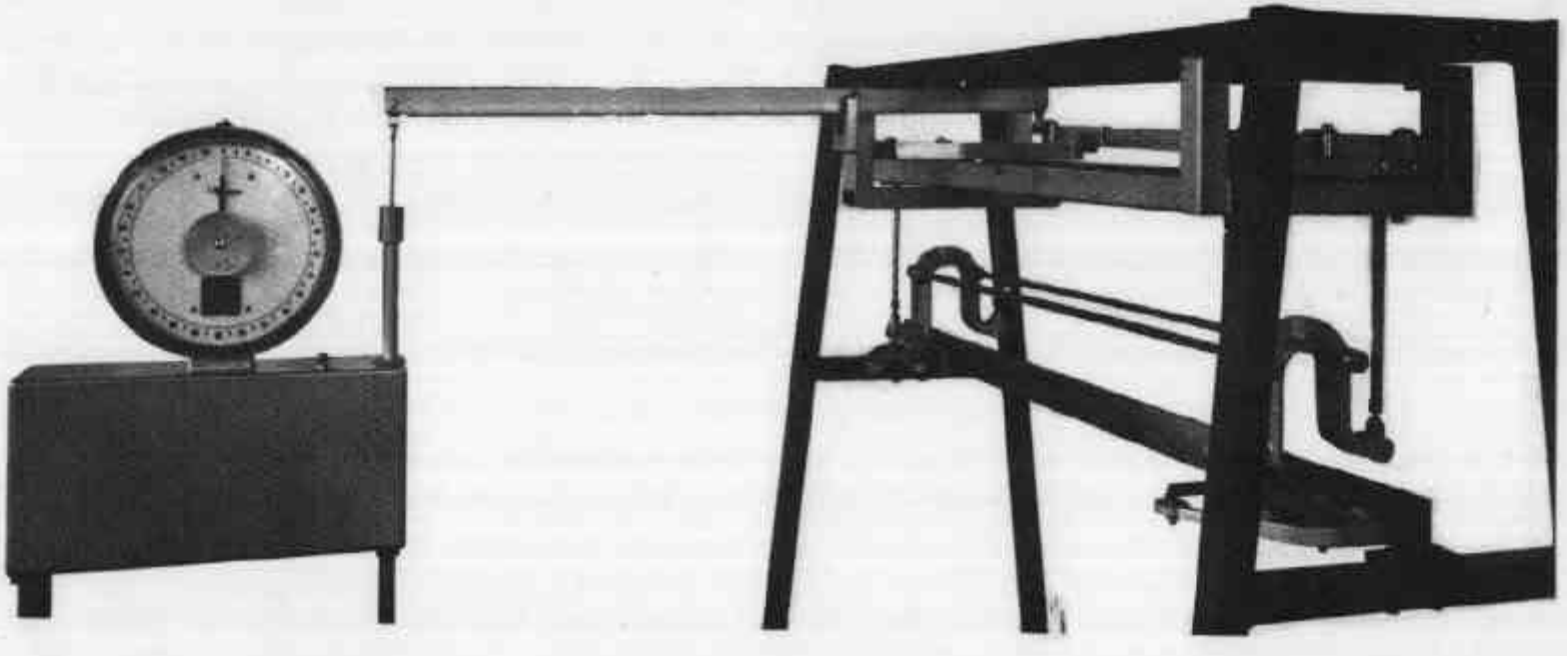
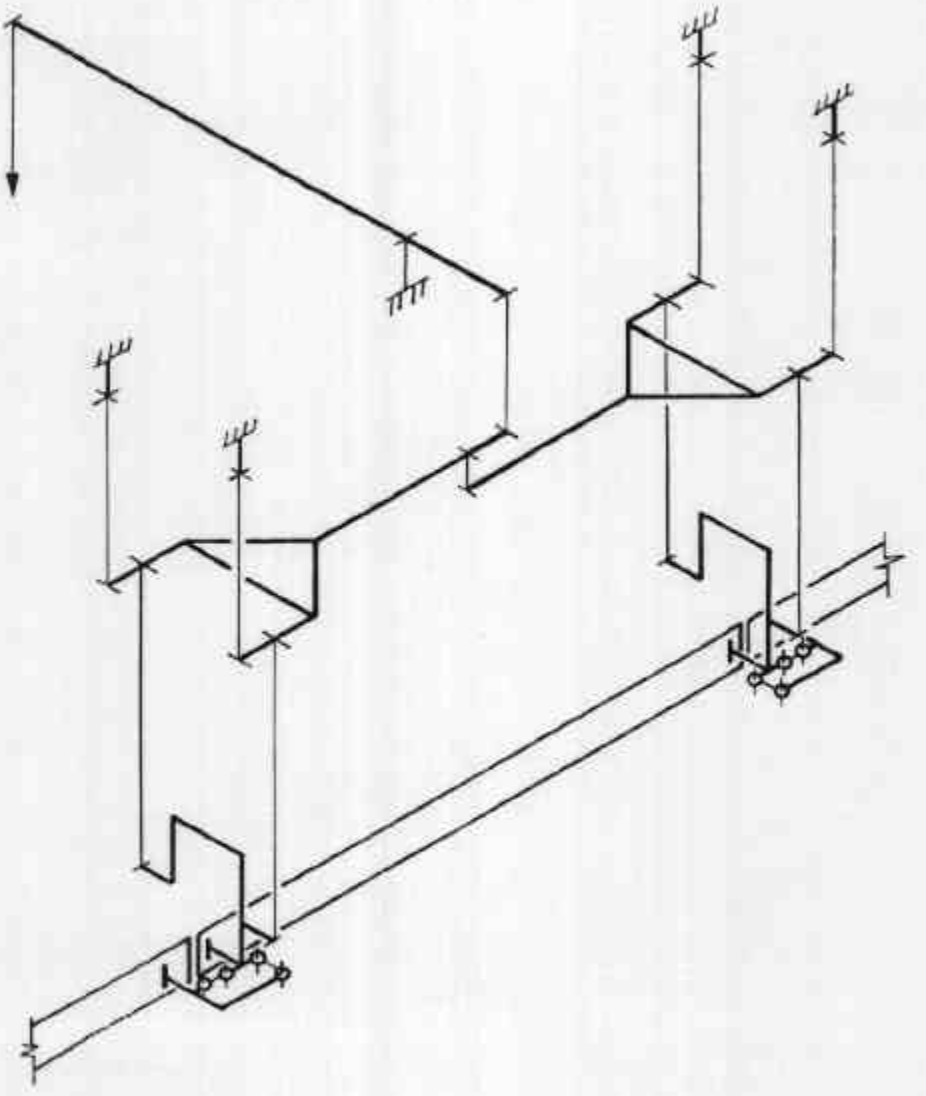


Mercury 211DA Weighing Instrument

FIGURE 6/18/5 - 2



Mercury 211DA — Schematic Drawing of
Lever Mechanism

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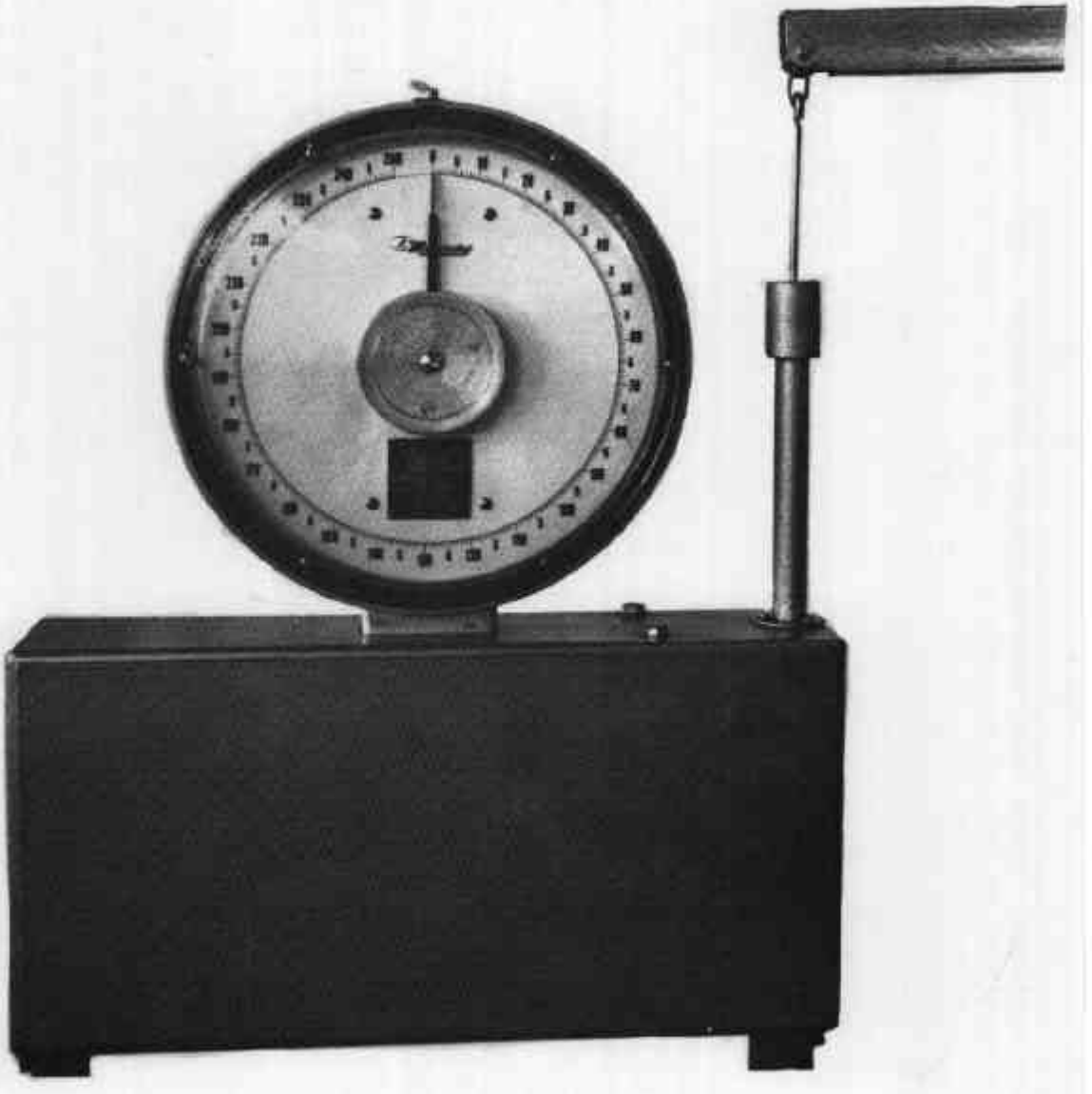
FIGURE 6/18/5 - 3



Mercury 211DA — Headwork

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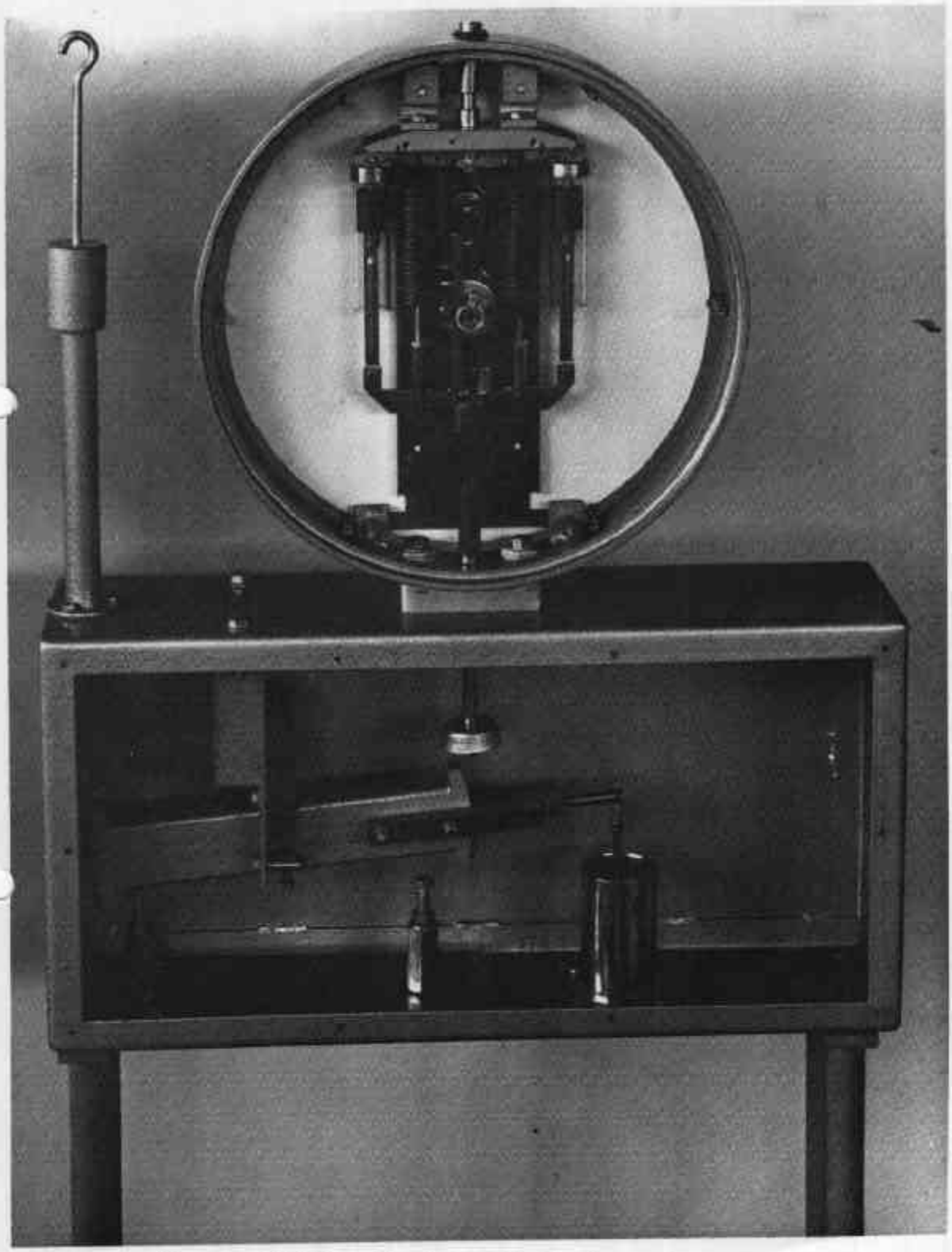
FIGURE 6/18/5 - 4



Mercury 211DA — Resistant Mechanism and
Main Headwork Lever

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FIGURE 6/18/5 - 5

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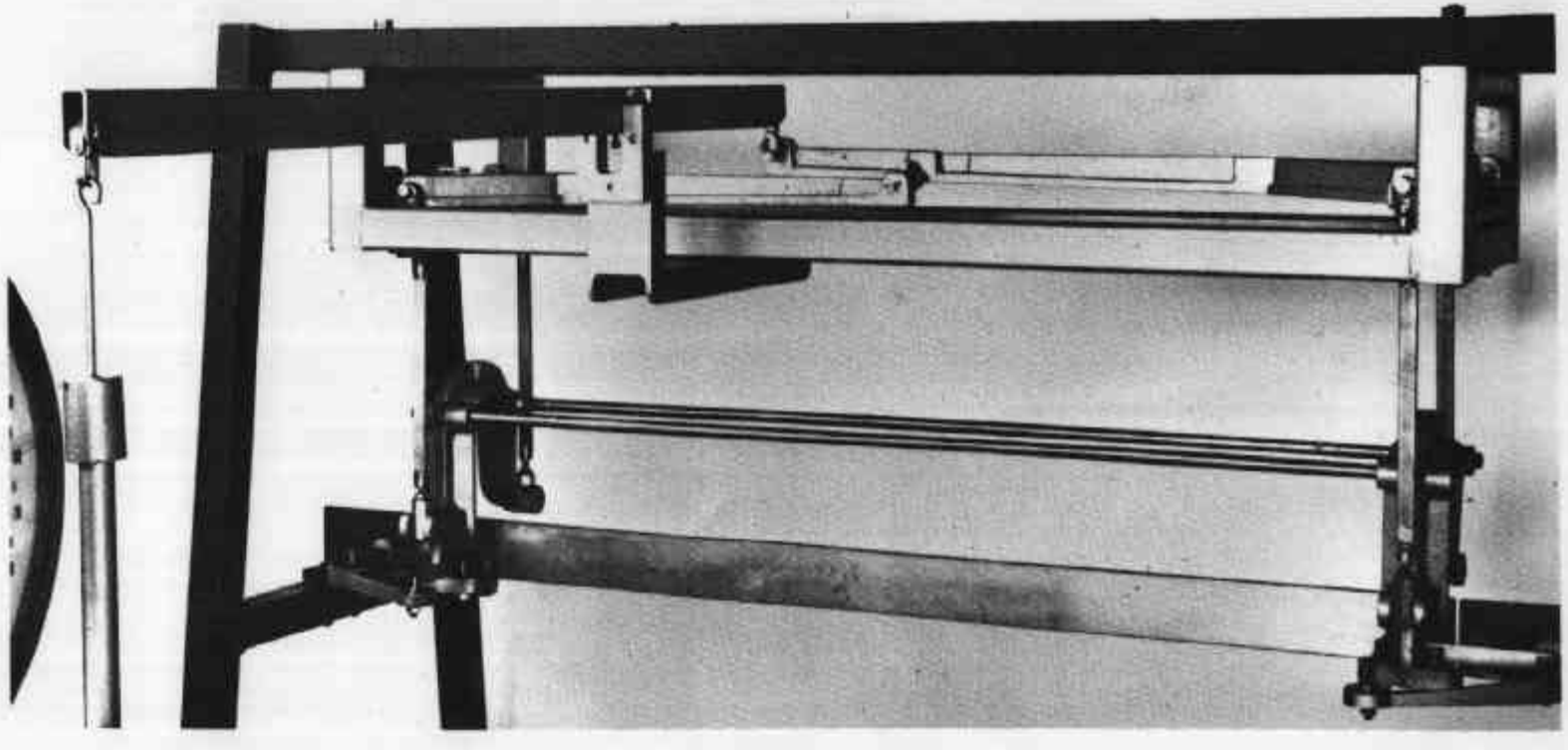

Mercury 211DA — Overhead Track and Lever Mechanism