

CERTIFICATE OF APPROVAL No 6/9C/31

This is to certify that the pattern and variants of the

Schenck NZ Weighing Instrument

submitted by Fraser, Hrones & Co. Pty Ltd,
63 Alexander Street,
Crow's Nest, New South Wales, 2065,

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

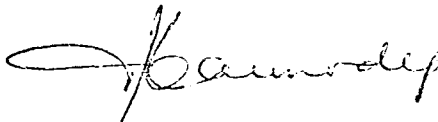
Date of Approval: 13 June 1974.

The pattern and variants are described in Technical Schedule No 6/9C/31, and in drawings and specifications lodged with the Commission.

The approval is subject to review on or after 1 July 1979.

All instruments conforming to this approval shall be marked with the approval number "NSC No 6/9C/31".

Signed



Executive Officer

Indexed

13/6/74



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/31

Pattern: Schenck NZ Weighing Instrument

Submittor: Fraser, Hrones & Co. Pty Ltd,
63 Alexander Street,
Crow's Nest, New South Wales, 2065.

Date of Approval: 13 June 1974

All instruments conforming to this approval shall be marked "NSC No 6/9C/31".

Description:

The pattern (see Figures 1 and 2) is of a platform weighing instrument of capacity up to 6000 kg with an optical weight indicator and mechanical ticket printer.

The headwork comprises:

1. Headwork cabinet (see Figures 1 and 2).
2. Single-pendulum-resistant mechanism (see Figures 3, 4 and 5) with a steel ribbon drive from the main headwork lever. The pendulum carries a transparent graticule (see Figures 5 and 6) marked with up to 3000 graduations which are projected on to a ground-glass weight-reading face and a magnetic damping mechanism in the form of a copper blade which passes through the field of a permanent magnet (see Figure 6).
3. Main headwork lever (see Figure 4) with a hand-operated zero adjustment (see Figure 7); a lockable hinged cover is fitted over the zero adjustment (see Figure 1).
4. Mechanical printer (see Figures 3 and 5) driven by an electric motor when the "tare" or "gross" buttons are pressed. A "T" indicating tare weight and a "G" indicating gross weight are printed on the

ticket (see Figure 8). The resistant mechanism is locked and the weight indication is suppressed during the print cycle.

5. Motion detector (see Figure 6). After a ticket has been printed the motion detector prevents the printer from operating until the resistant mechanism has been disturbed and for a fixed period after the resistant mechanism is again steady.
6. Seal — the rear cover of the headwork is sealed by stamping plugs.

The basework is a four-lever system (see Figures 9 and 10) comprising two second-order main levers, two transfer levers in series, and a platform support frame.

The approval includes the following:

1. With weight-reading faces on one or both sides of the instrument.
2. Of capacity up to 1500 kg, in which case only one transfer lever is used.
3. The headwork without a ticket printer (known as Model NS) (see Figure 11). The headwork shall not be rotatable but may be fixed in any direction.

Special Tests:

1. Motion Detector

Place a load equal to $1\frac{1}{2}$ graduations on the load receptor, disturb the weighing mechanism and press the print button to record the load. Check that a second operation of the print button does not cause the printer to operate. Without disturbing the weighing mechanism, remove the $1\frac{1}{2}$ -graduation load and press the print button; a new load value should be printed after a delay of not less than $1\frac{1}{2}$ seconds.

This sequence should be repeated at several loads up to the instrument's capacity.

2. Ticket Printer

The application of the test loads specified in Table 1 should print an "accept" indication as described in Appendix 10. *

TABLE 1.

Test Load in Graduations**

0	10	20	598,5	2198
1	11	49	698,5	2498
2	12	99	798,5	2998
3	13	149	898,5	3000
4	14	199	998,5	
5	15	249	1198,5	
6	16	299	1398,5	
7	17	349	1598,5	
8	18	399	1798,5	
9	19	449	1998,5	
		499		

* The Commission's General Specifications for Measuring Instruments to be Used for Trade, 4th Edition, January 1972.

** Test Load = Number of graduations x Graduation Value

FIGURE 6/9C/31 - 1

CAPACITY & GRADUATION VALUE

UNIT OF
MEASUREMENT



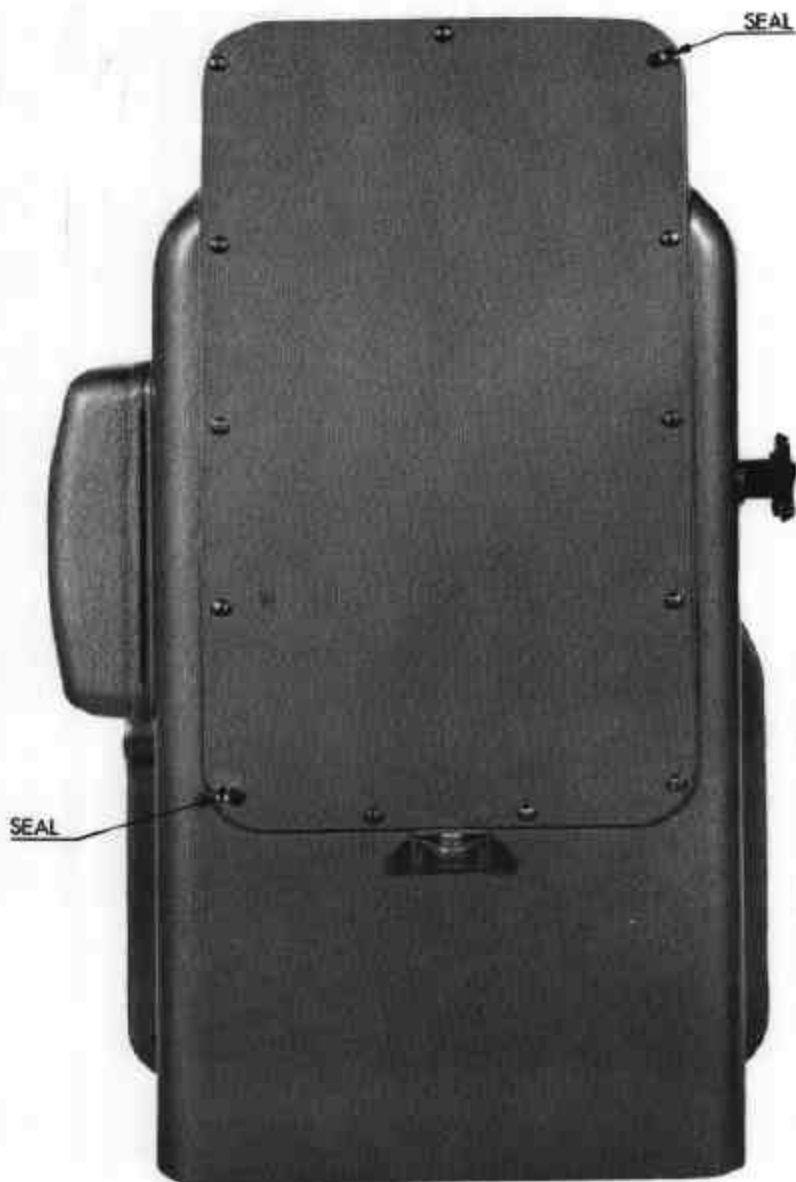
LOCKED DOOR OVER ZERO ADJUSTMENT

Model NZ — Headwork

(The reading face is marked with the unit of measurement, for example, "tonnes", "t", or "kg". The capacity and graduation value is marked adjacent to the reading face.)

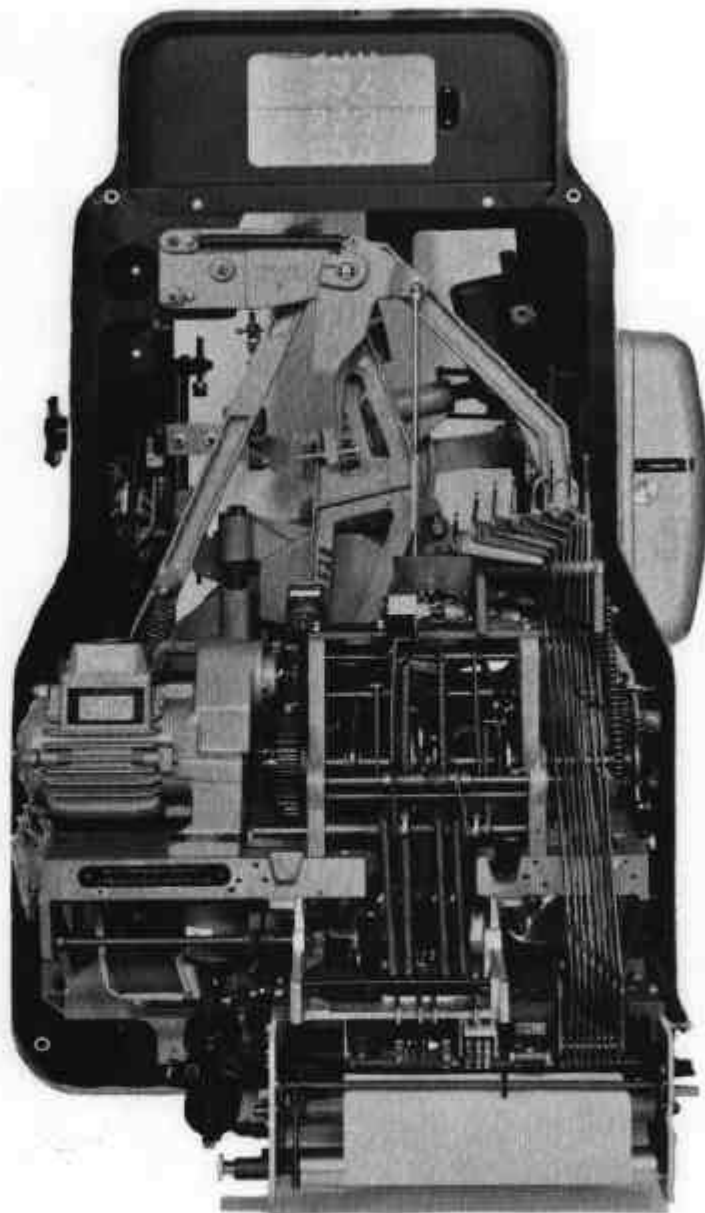
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FIGURE 6/9C/31 - 2



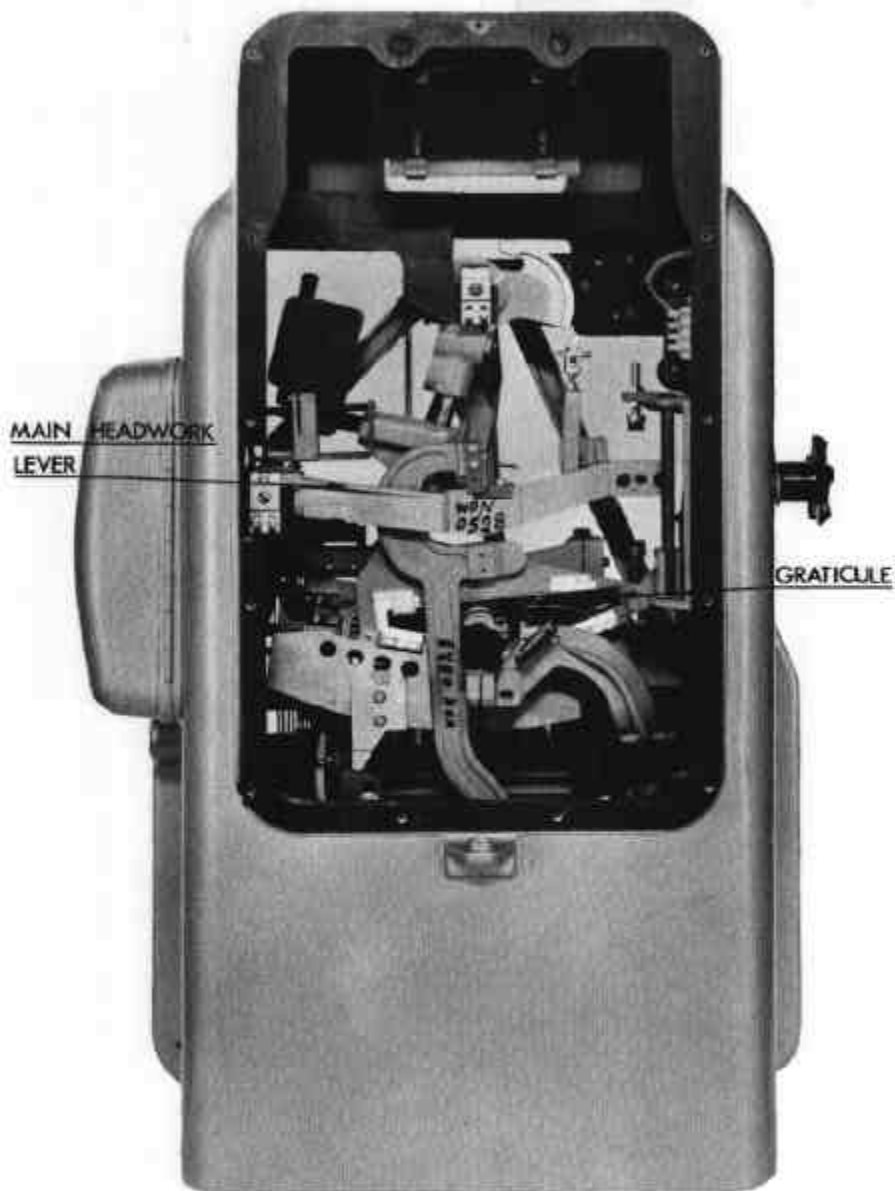
Model NZ — Rear of Headwork
(The level indicator is provided for installation purposes
only.)

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Model NZ — Resistant Mechanism and Ticket Printer

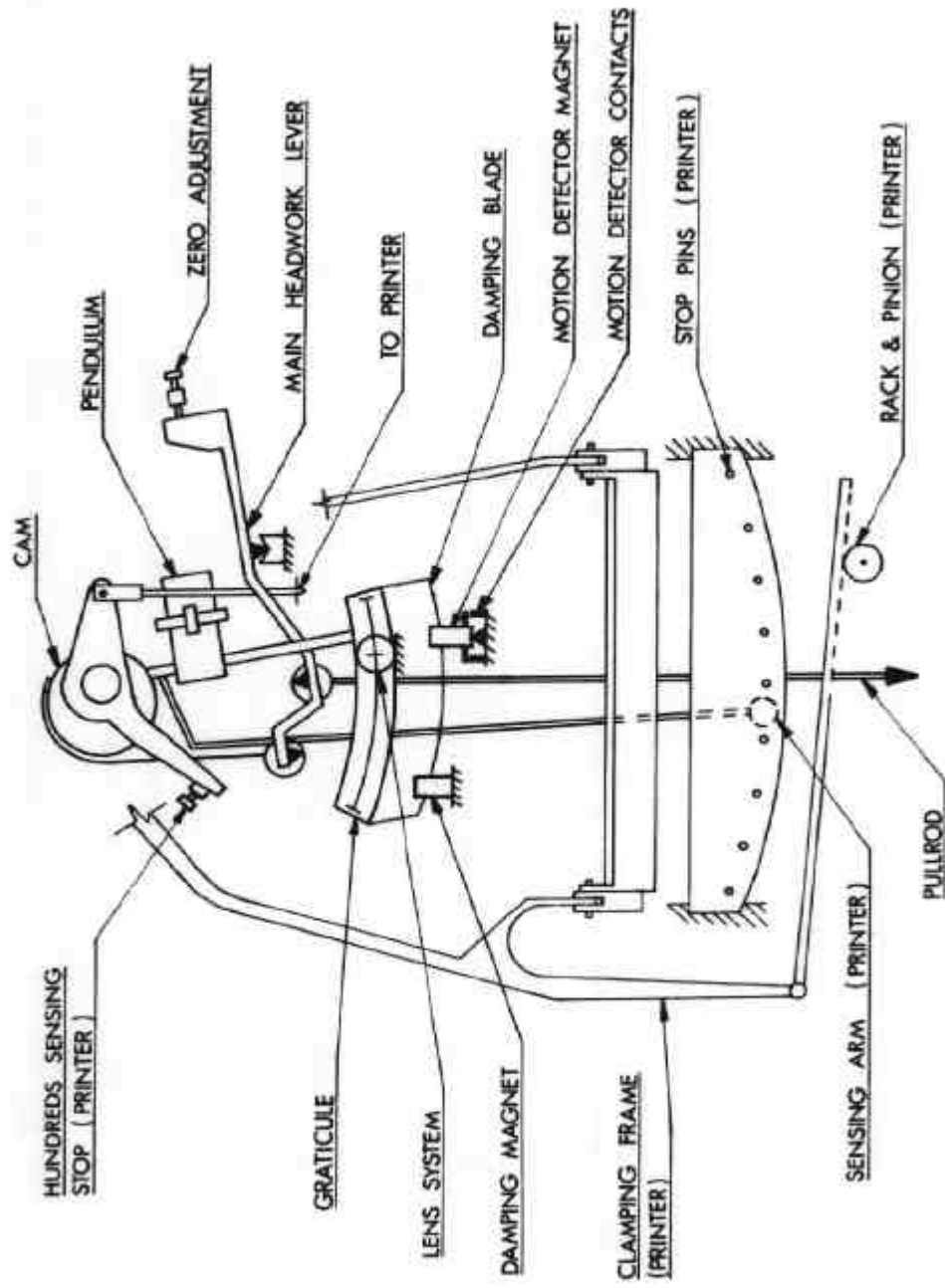
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Model NZ — Resistant Mechanism
(Level indicator is provided for installation purposes only.)

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FIGURE 6/9C/31 - 5



Resistant Mechanism — Schematic Diagram

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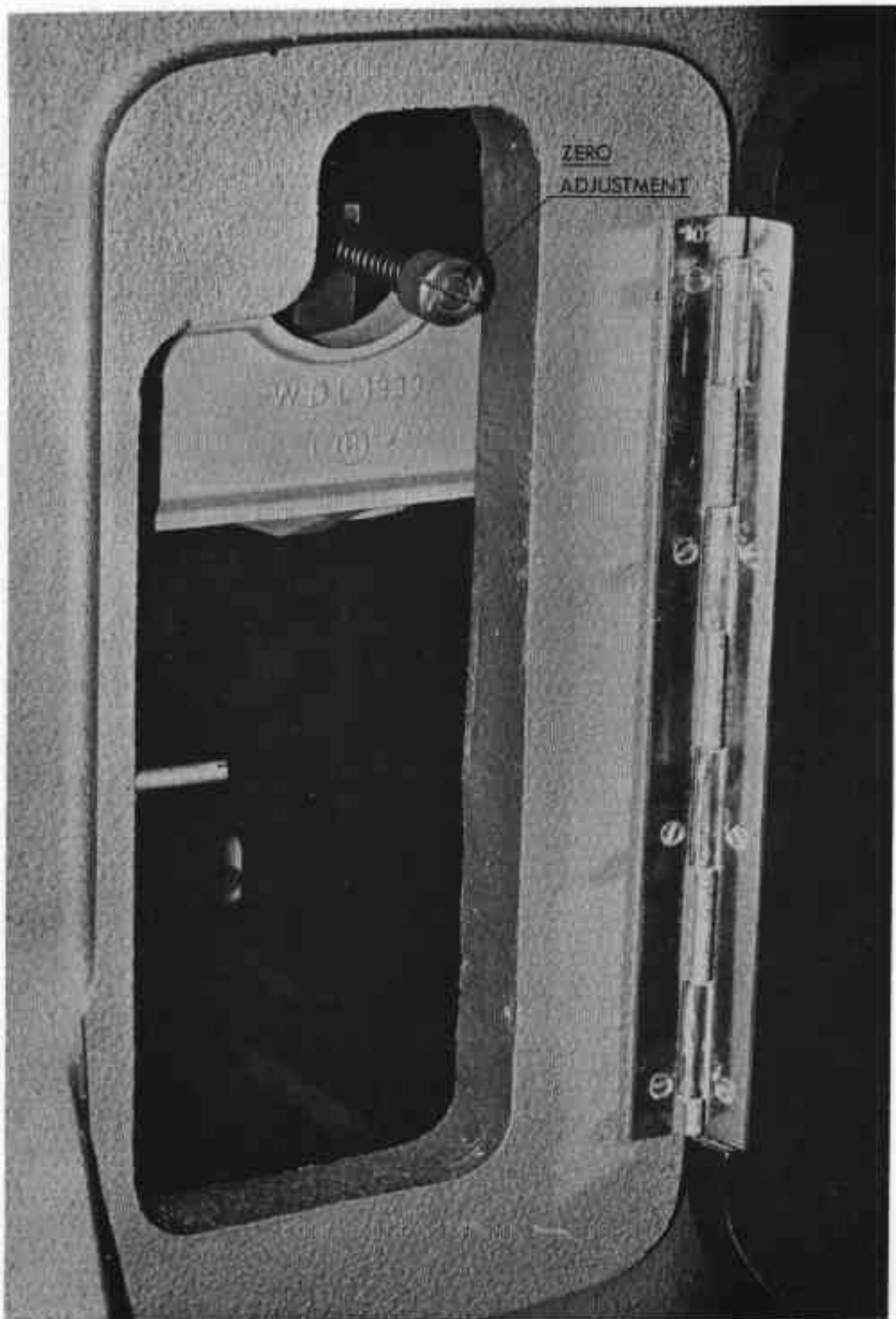
FIGURE 6/9C/31 - 6



Graticule Damping Mechanism and Motion Detector

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FIGURE 6/9C/31 - 7



Model NZ — Headwork — Zero Adjustment

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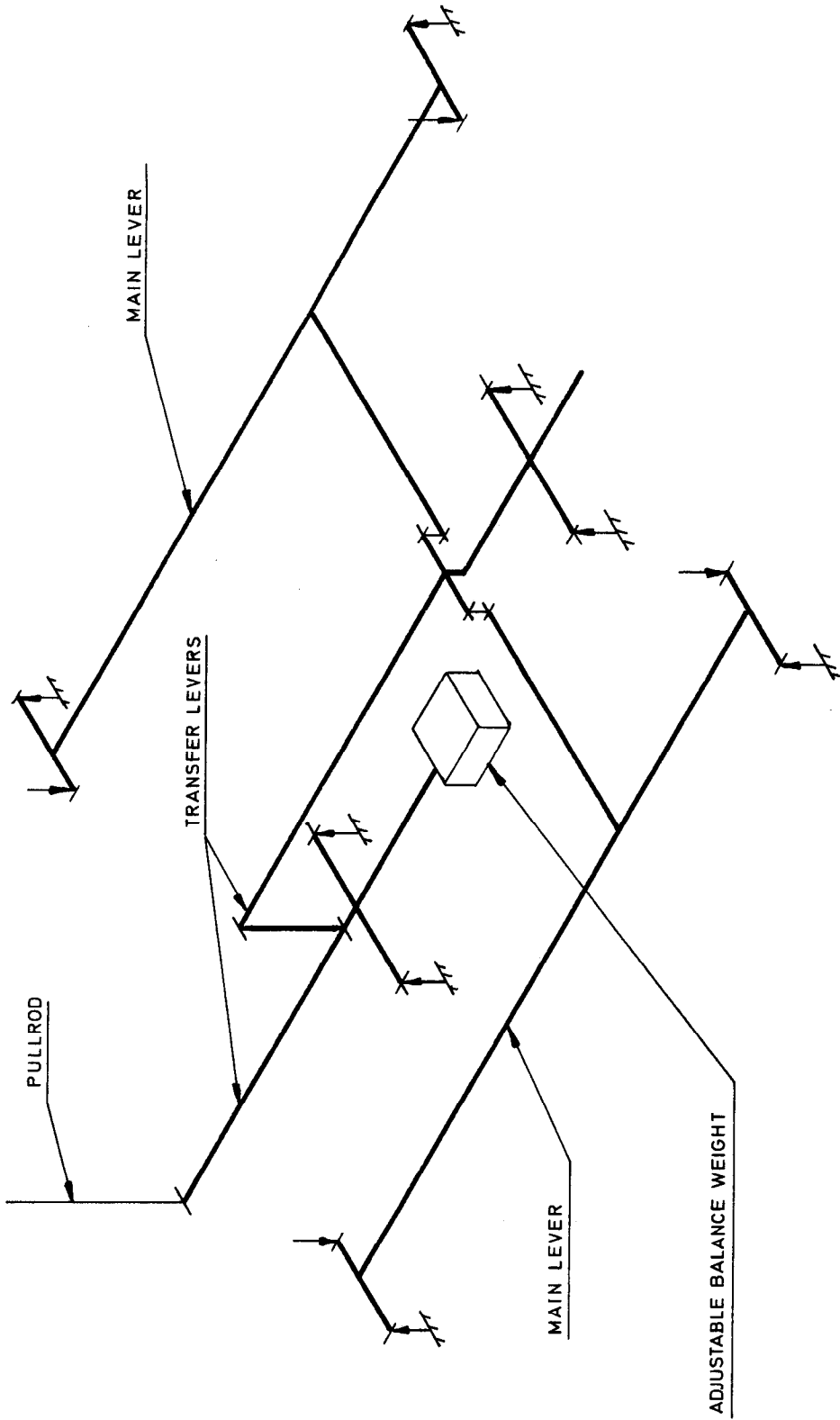
FIGURE 6/9C/31 - 8

<p>G 3954,0 kg T 3741,0 kg</p> <p>T = Tare G = Gross</p>
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Sample Ticket

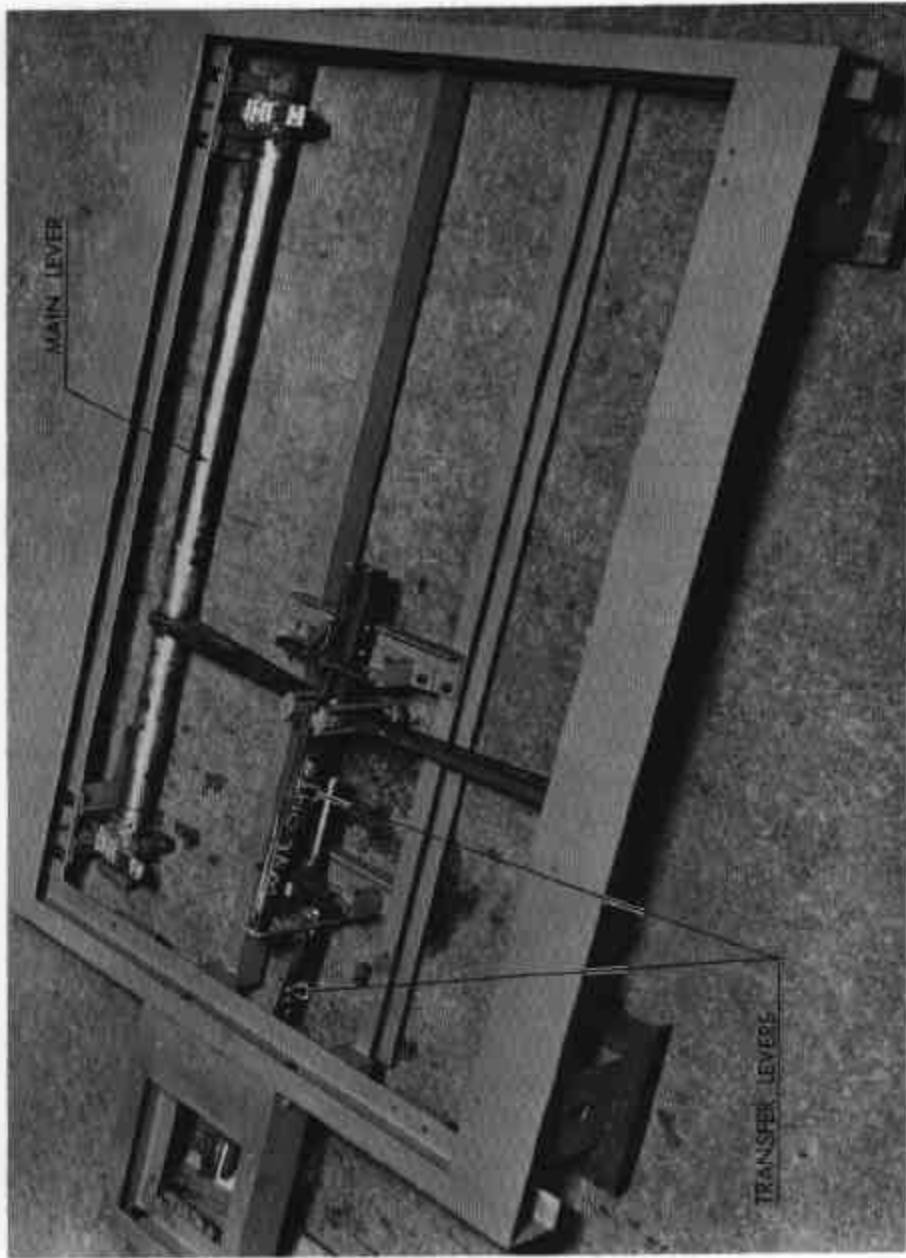
FIGURE 6/9C/31 - 9



Schematic Diagram of Basework Lever System

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FIGURE 6/9C/31 - 10



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Model NS — Headwork

(The reading face is marked with the unit of measurement, for example, "tonne", "t", or "kg". The capacity and graduation value is marked adjacent to the reading face.)

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