



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/39

Pattern: Busch 2001 Weighing Instrument

Submittor: Ultra Scales Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020.

Date of Approval: 8 May 1975

Condition of Approval:

All instruments conforming to this approval shall be marked "NSC No 6/9C/39".

Description:

The pattern (see Figure 1) is a fixed platform weighing instrument of maximum capacity (Max) up to 6000 kg with an additive tare capacity of up to 800 kg.

The weight-reading face is marked, for example:

III

Max = 6000 kg
Min = 500 kg
d = 10 kg
T = + 800 kg

The headwork comprises:

1. Headwork cabinet with octagonal, square or other shape of dial housing (see Figure 2).
2. Double-pendulum-resistant mechanism (see Figures 3 and 4). A tape drive from one pendulum moves the index (pointer) over the weight-reading face.
3. Weight-reading face, marked with a maximum of 600 graduations.

4. Main headwork lever (see Figures 5 and 6). A zero-adjustment device comprising a chain of small balance weights is connected between the end of the main lever and a take-up spool on the cabinet.
5. Taring device (see Figures 5 and 6). The poise is moved by a threaded shaft which is rotated through a series of universal joints by a handle on the side of the cabinet. The tare-reading face has a maximum of 160 graduations and is on the same side of the headwork as the weight-reading face.
6. Intermediate lever(s) (see Figure 6) between the main headwork lever and the basework.

The basework (see Figures 7 and 8) is a three-lever system having two main levers and a transfer lever. The platform is supported from the main levers by swinging links. The basework lever system is suitable for loads of up to 6800 kg.

The approval includes:

1. The headwork with or without intermediate levers. The intermediate levers may be arranged so that the headwork can be used with an overhead load receptor (see Figure 9).
2. The headwork with or without the taring device. When no taring device is fitted, there may be a weight-reading face on each side of the instrument.
3. The basework with additional transfer levers.

Note: A non-contact sensing device (photo-cells, proximity switch, etc.) to control peripheral equipment may be fitted. If the device is able to be "turned off" a check should be made that the indication does not change when the device is turned off.



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TECHNICAL SCHEDULE No 6/9C/39

VARIATION No 1

Pattern: Busch Weighing Instrument Model 2001

Submittor: Ultra Scales Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020.

Date of Approval of Variation: 25 June 1976

The modification described in this Schedule applies to the patterns described in Technical Schedule No 6/9C/39 dated 4 August 1975.

All instruments conforming to this approval shall be marked "NSC No 6/9C/39".

Description:

The approved modification provides for the load receptor to be supported on a ball suspension unit (see Figure 10) on the two main levers. The basework arrangement is illustrated in Figures 11 and 12.



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TECHNICAL SCHEDULE No 6/9C/39

VARIATION No 2

Pattern: Busch Weighing Instrument Model 2001

Submittor: Ultra Scales Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020.

Date of Approval of Variation: 20 July 1976

The modification described in this Schedule applies to the patterns described in Technical Schedule No 6/9C/39 dated 4 August 1975 and Technical Schedule No 6/9C/39 - Variation No 1 dated 21 July 1976.

All instruments conforming to this approval shall be marked "NSC No 6/9C/39".

Description:

The approved modification provides for one or two graduated or ungraduated tare bars; the graduated tare bars have up to 200 graduations each and are on the same side of the instrument as the weight reading face (see Figure 13).

CERTIFICATE OF APPROVAL No 6/9C/39

VARIATION No 3

This is to certify that the following modification of the patterns of the

Ultra Weighing Instrument with Busch Model 2001 Headwork

approved in Certificate No 6/9C/39 dated 4 August 1975 and
subsequent variations

submitted by Ultra Scales Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020,

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

Date of Approval: 18 August 1977

The approved modification, described in Technical Schedule No 6/9C/39 -
Variation No 3 and in drawings and specifications lodged with the
Commission, provides for other Commission-approved baseworks.

The approval is subject to review on or after 1 June 1980.

All instruments conforming to this approval shall be marked with the
approval number "NSC No 6/9C/39".

Signed



Executive Officer



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/39

VARIATION No 3

Pattern: Ultra Weighing Instrument with Busch Model 2001
Headwork

Submitter: Ultra Scales Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020.

Date of Approval of Variation: 18 August 1977

The modification described in this Schedule applies to the patterns described in Technical Schedule No 6/9C/39 dated 4 August 1975 and Technical Schedule No 6/9C/39 - Variation Nos 1 and 2 dated 21 July 1976 and 12 August 1977 respectively.

All instruments conforming to this approval shall be marked "NSC No 6/9C/39".

Description:

The approved modification provides for other Commission-approved baseworks replacing the basework described in the patterns, provided that -

- (a) the basework is of an instrument conventionally known as a platform weighing machine, weighbridge or nopper 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:

Accuracy Requirements

- (i) $\pm 0,5e$ for loads between zero and 500e inclusive;

- (ii) $\pm 1e$ for loads between 500e exclusive and 2000e inclusive;
- (iii) $\pm 1,5e$ for loads greater than 2000e.

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 6/9C/39
 Basework NSC No"

J.B

6/9C/39
18/3/86



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/9C/39

CHANGE No 1

The following change is made to the approval documentation for the

Busch Model 2001 Weighing Instrument

submitted by Ultra Scales Pty Ltd
33-35 Judge Street
Sunshine Vic 3020.

In Technical Schedule No 6/9C/39 Variation No 1 dated 21/7/76, add the following to the description of instruments fitted with ball suspension units.

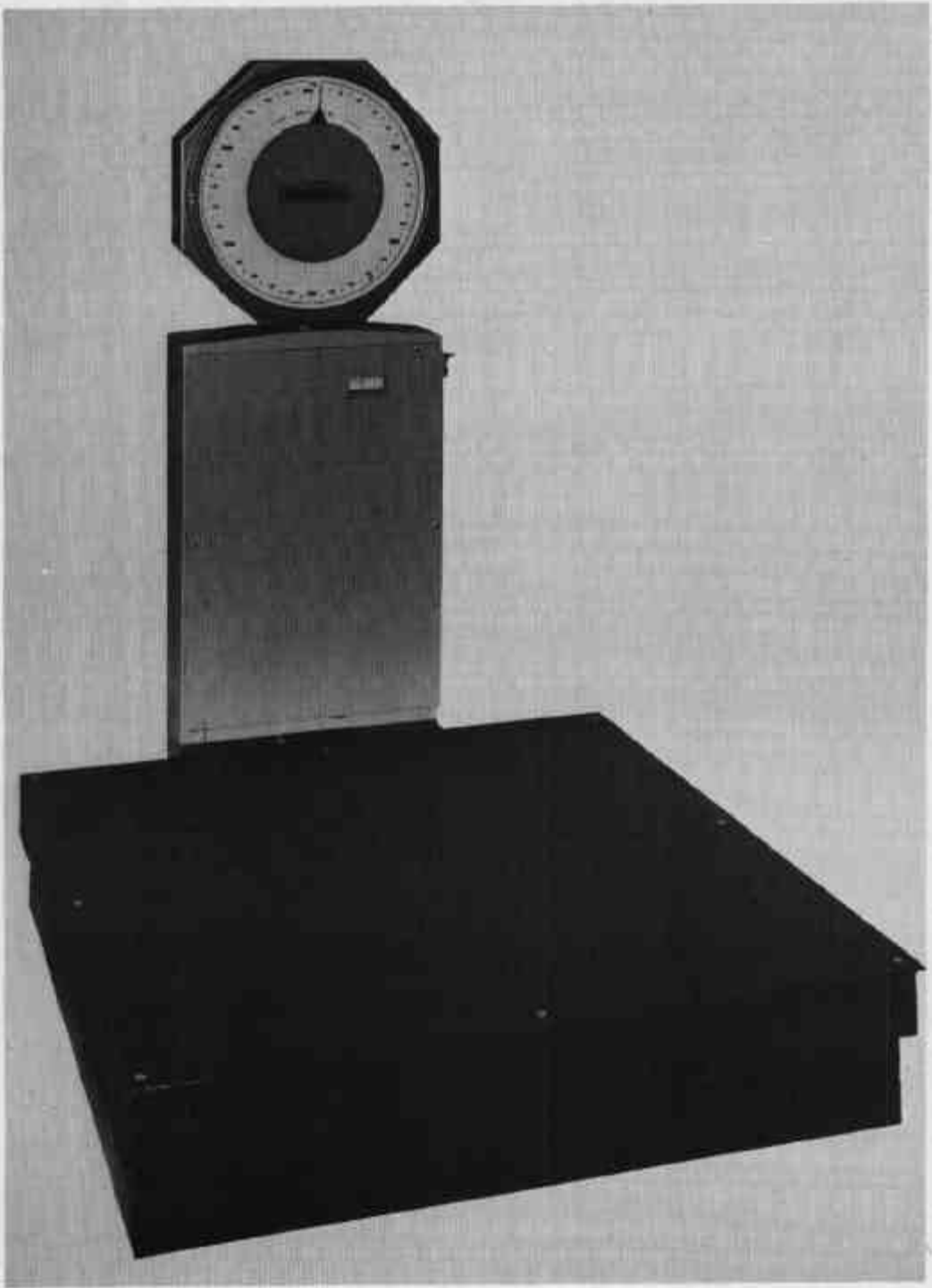
"The basework is approved for use with up to 3000 verification scale intervals when used with other Commission-approved headworks including digital indicators (in which case a Commission-approved load cell is fitted in the pullrod).

The number of scale intervals applicable to the weighing instrument shall be no greater than the number of verification scale intervals approved for the basework (3000e) or the load cell or the indicator (where applicable), whichever is the smallest."

Signed

Acting Executive Director

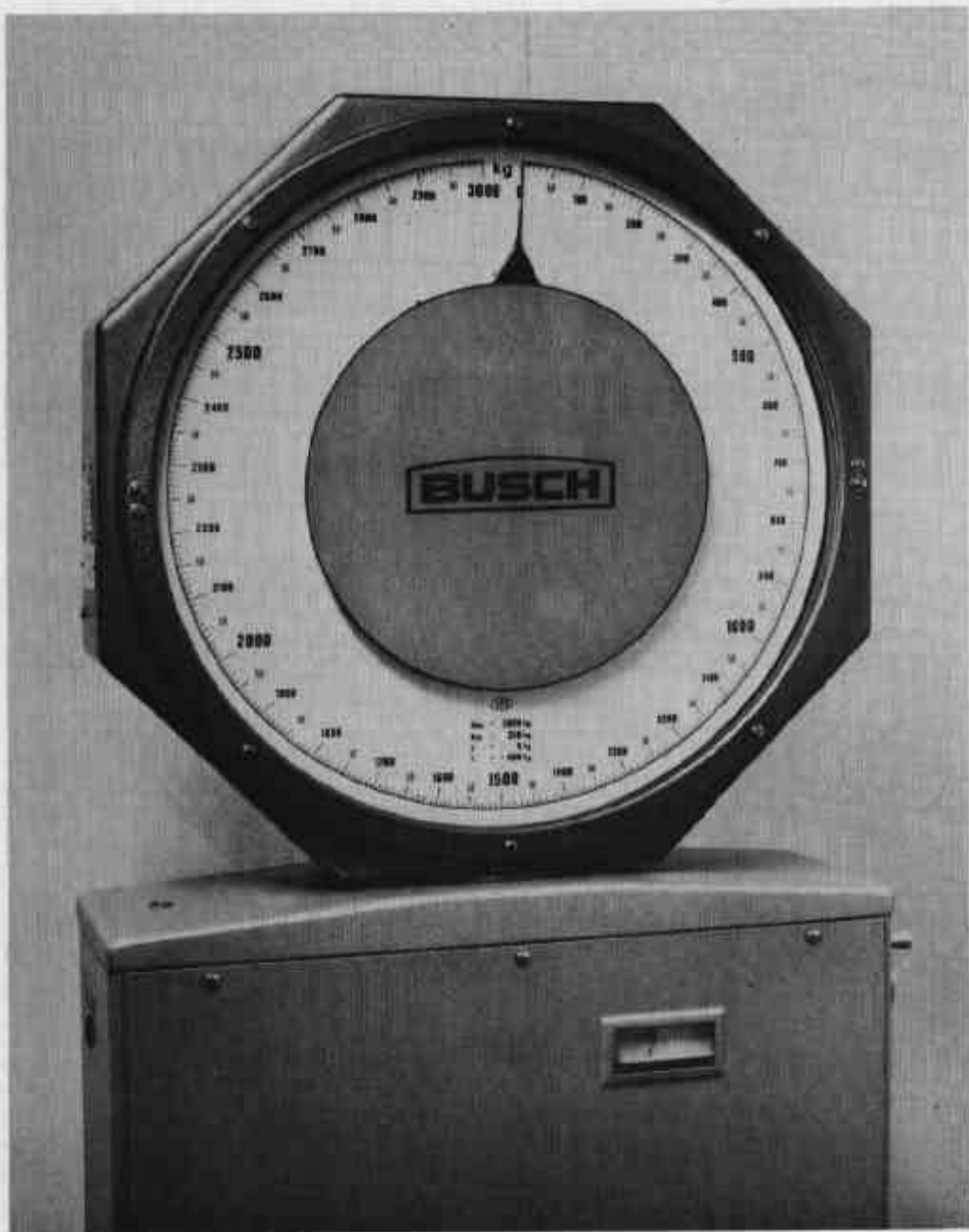
FIGURE 6/9C/39 - 1



Busch 2001

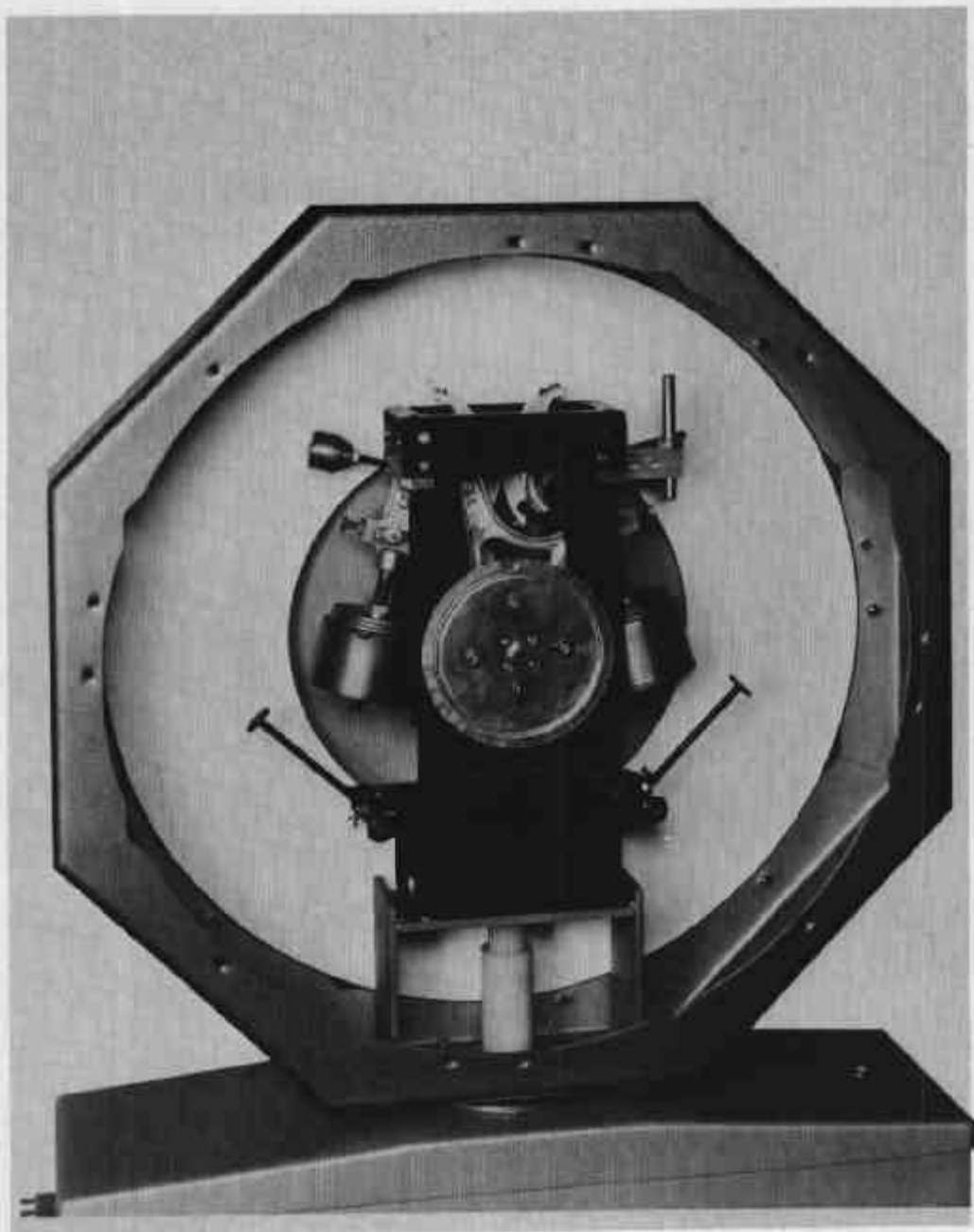
4/8/75

FIGURE 6/9C/39 - 2



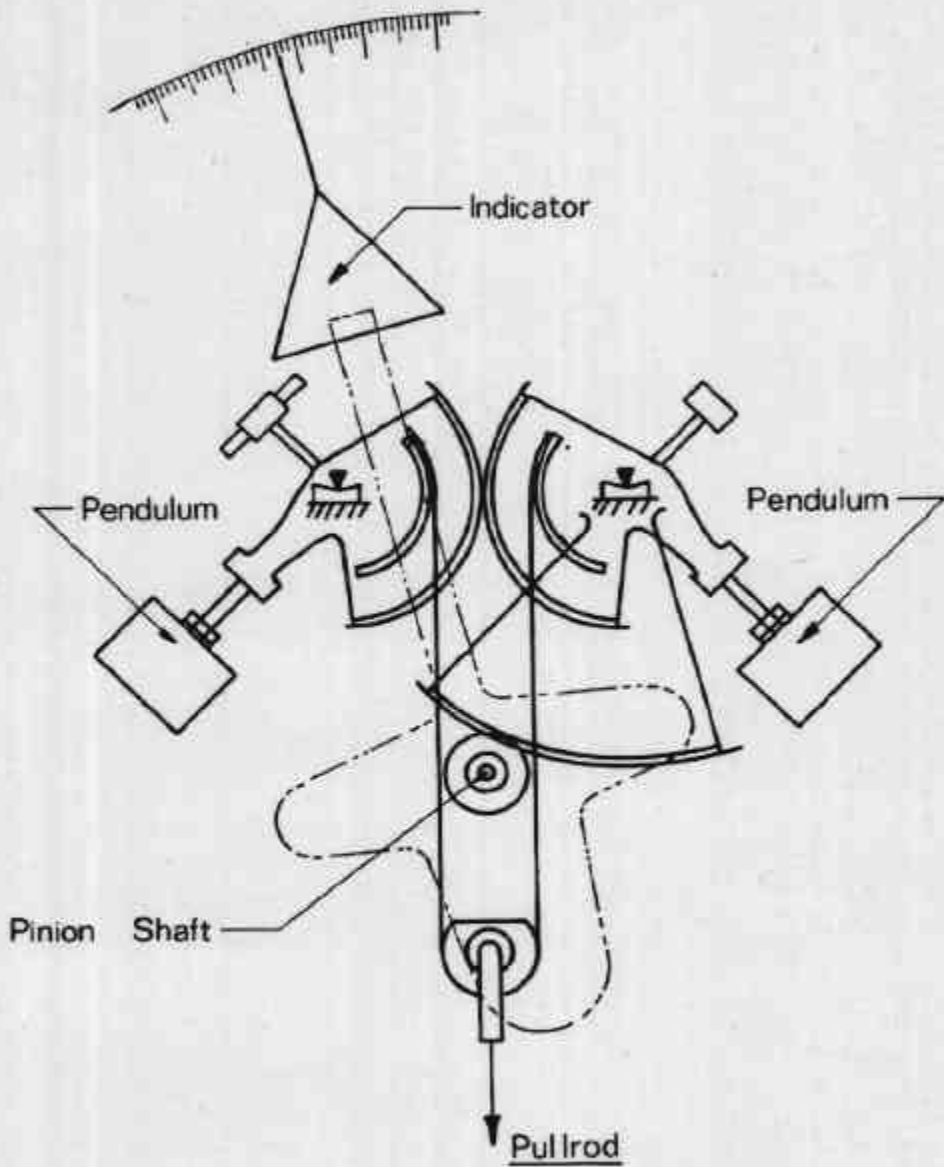
Busch 2001 - Weight and Tare-reading Faces

4/8/75



Resistant Mechanism

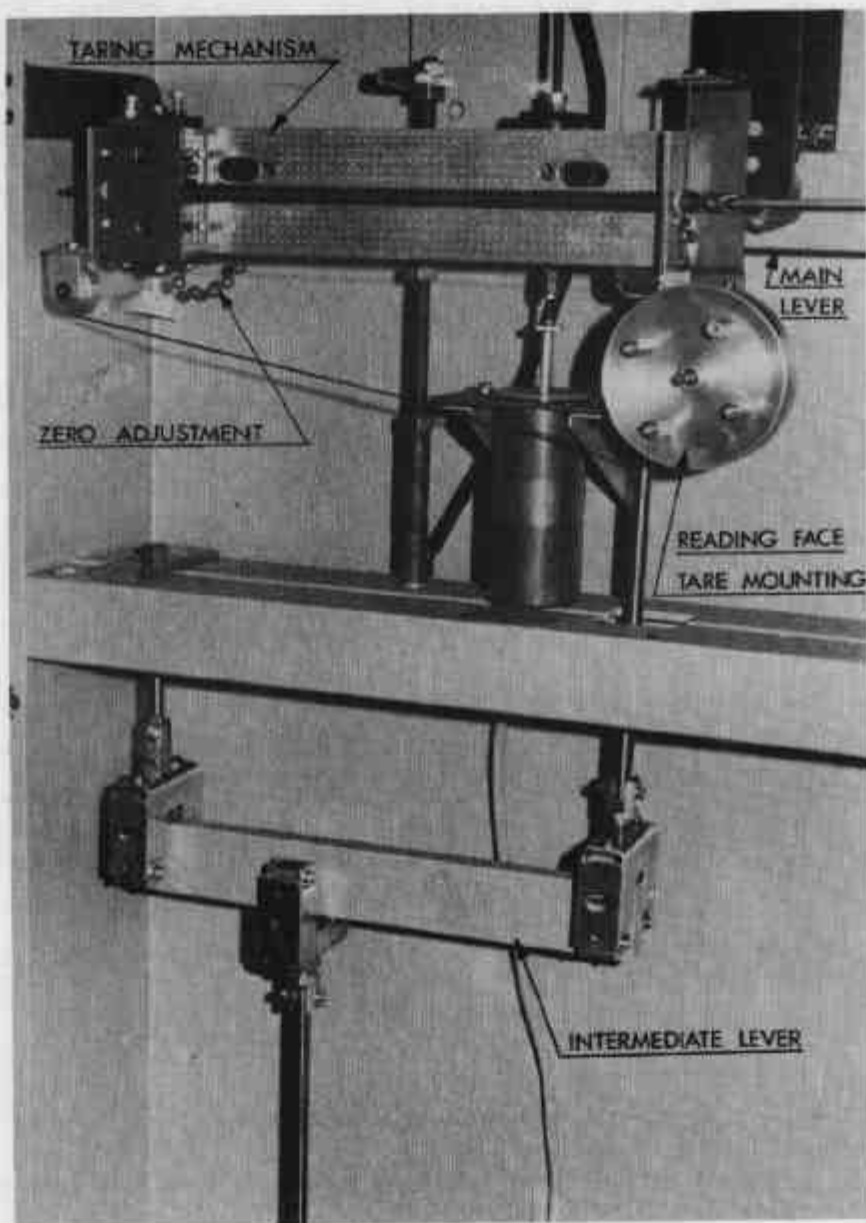
4/8/75



Resistant Mechanism — Schematic Diagram

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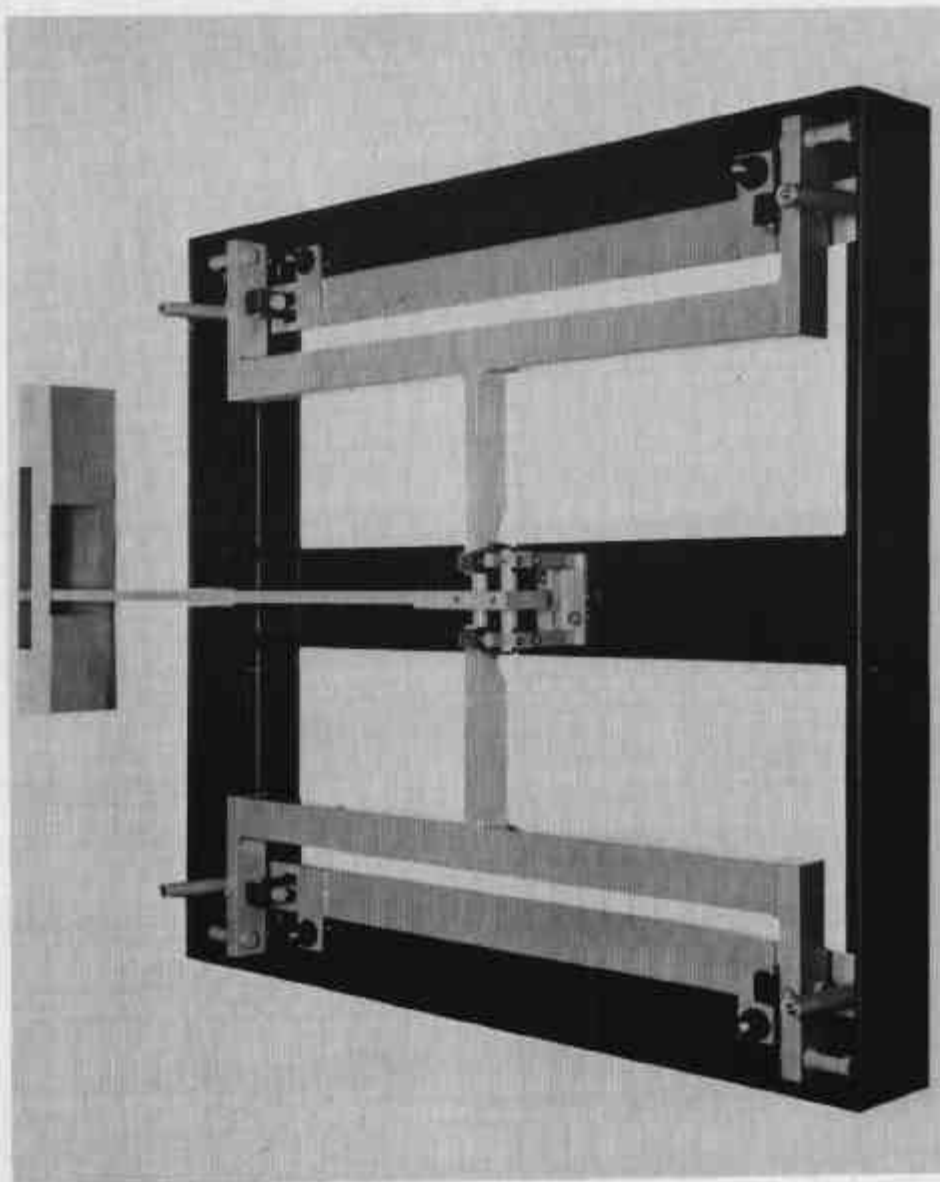
FIGURE 6/9C/39 - 6



Taring Mechanism, Main Headwork Lever and Intermediate
Lever

4/8/75

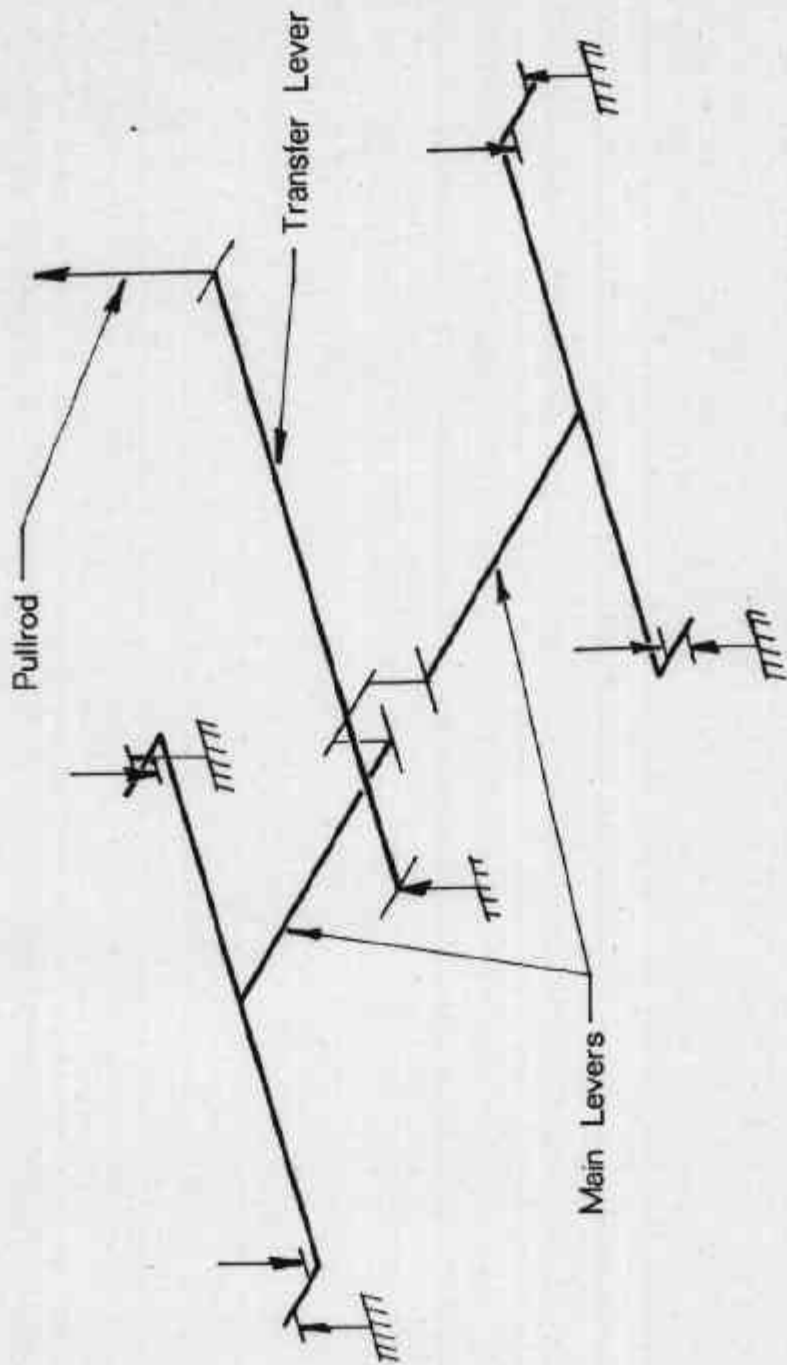
FIGURE 6/9C/39 - 7



Basework Lever System
(illustrated is a lever system with a maximum safe load of 3800 kg)

4/8/75

FIGURE 6/9C/39 - 8



Basework Lever System — Schematic Diagram

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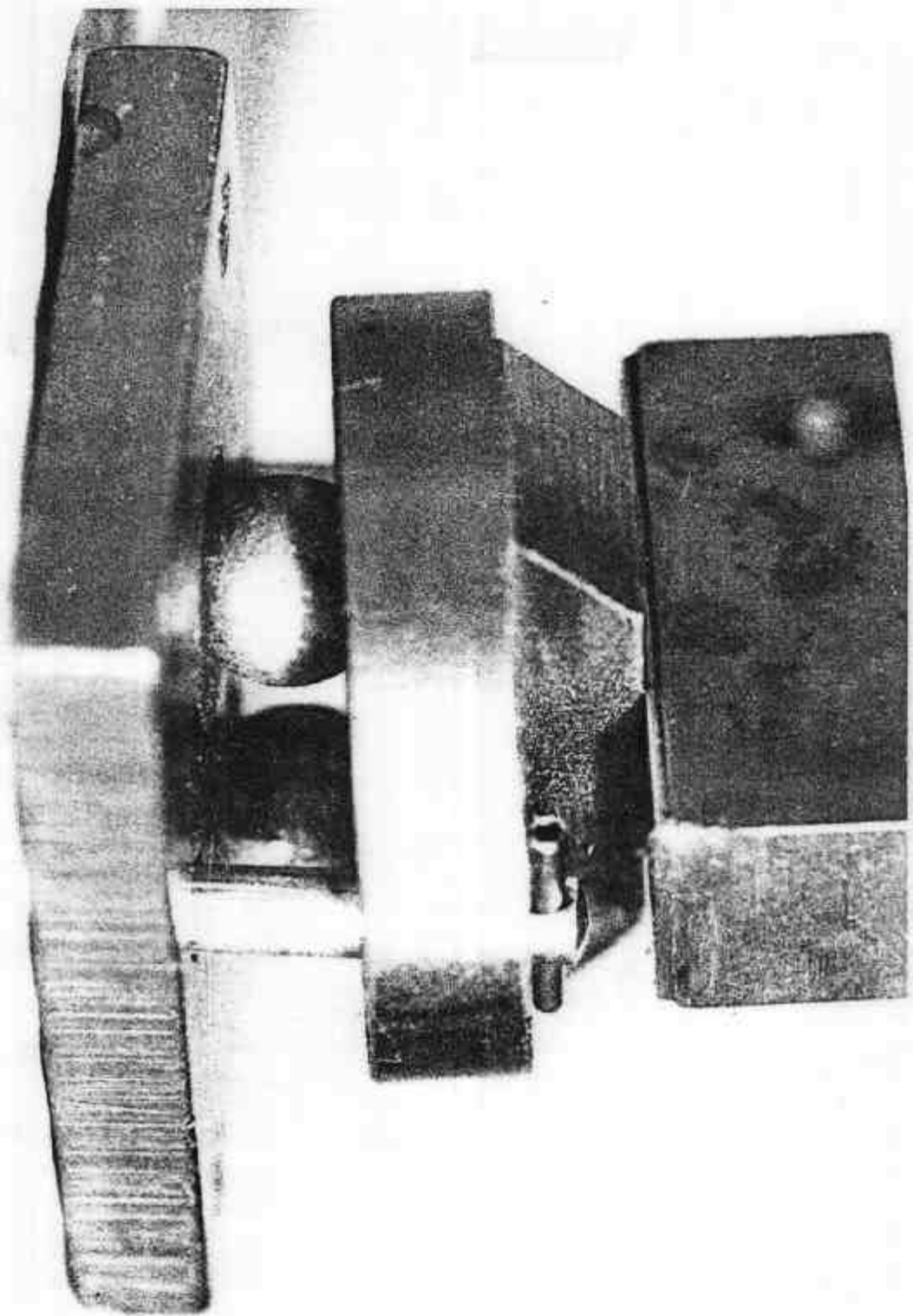
FIGURE 6/9C/39 - 9



Busch 2001 Headwork Arranged for use with
an Overhead Load Receptor

4/8/75

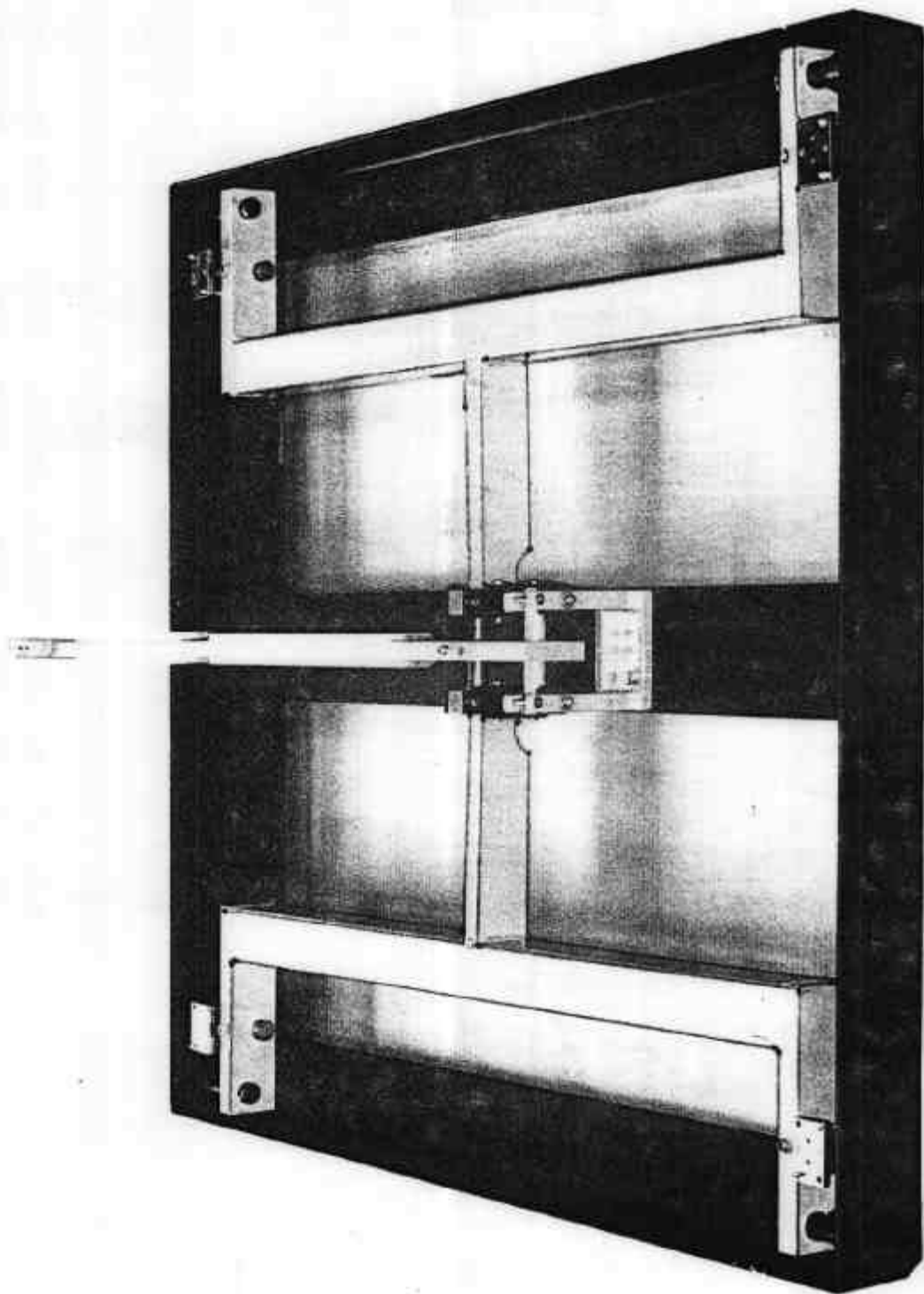
FIGURE 6/9C/39 - 10



Ball Suspension Unit

21/7/76

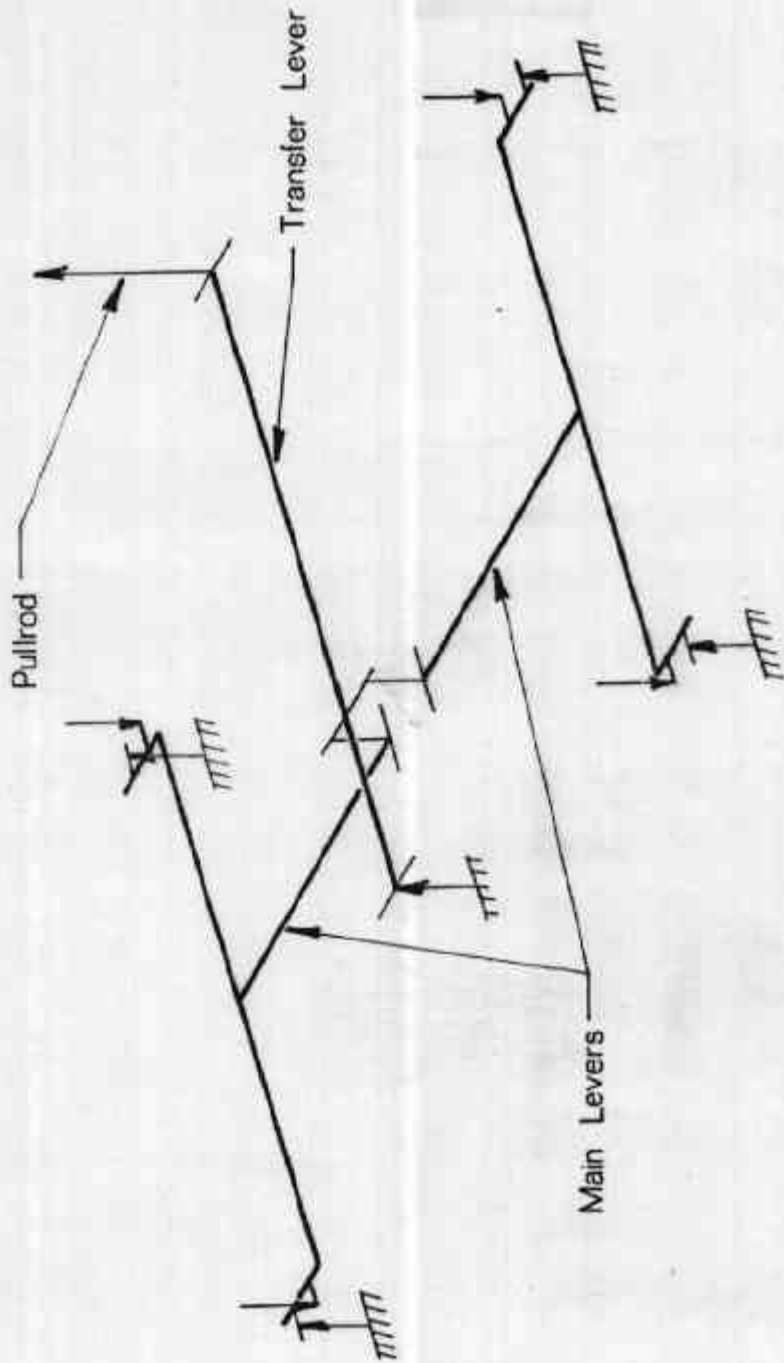
C
FIGURE 6/90/39 - 11



Basework Lever System

21/7/76

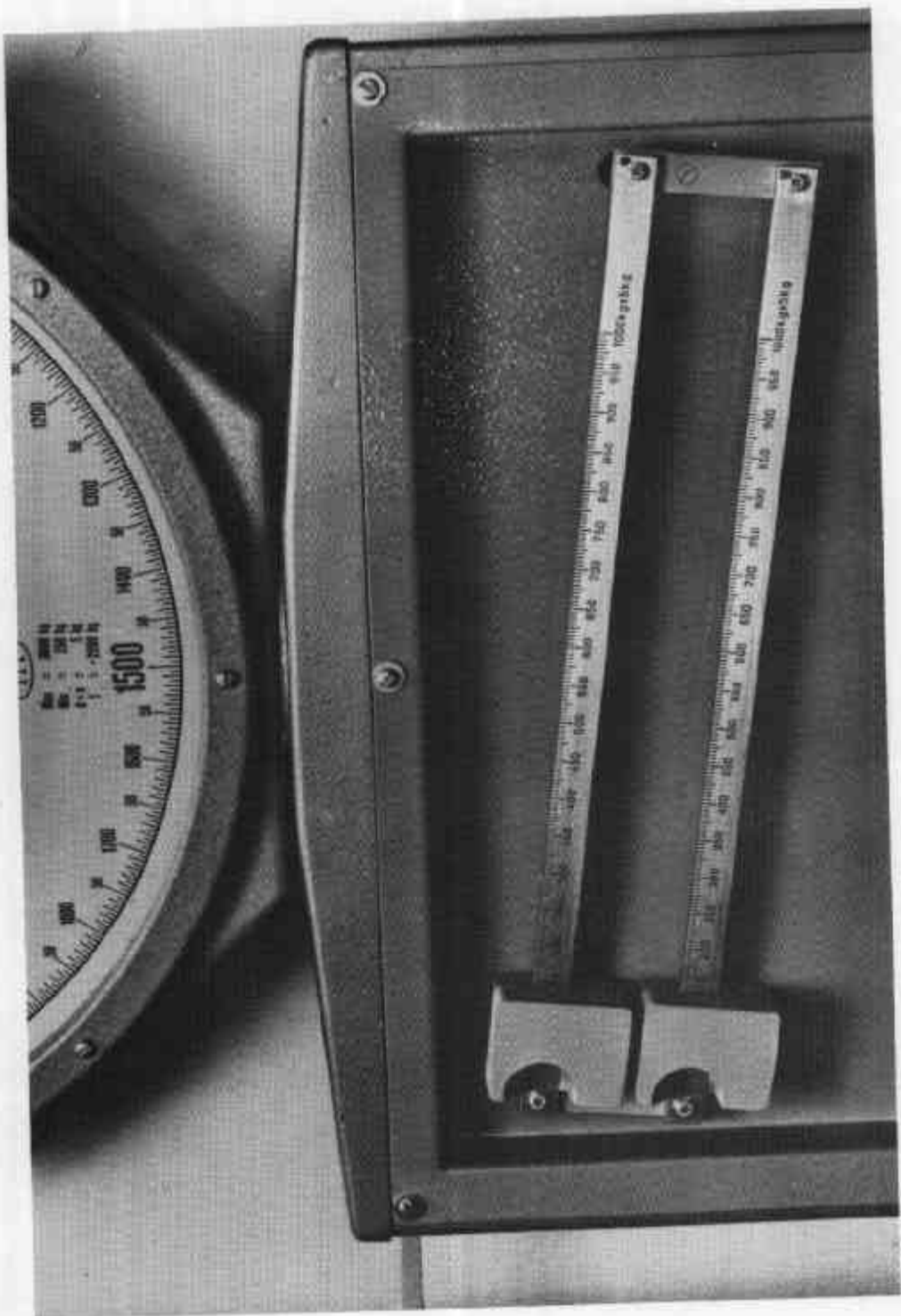
FIGURE 6/9C/39 - 12



Basework Lever System — Schematic Diagram

21/7/76

FIGURE 6/9C/39 - 13



Graduated Tare Bars

12/8/77