P.O. Box 282 NORTH RYDE
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CERTIFICATE OF APPROVAL No 5/6A/100

VARIATION No 3

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

Gilbarco Driveway Flowmeters

approved in Certificate of Approval No 5/6A/100 dated 21 November 1974 and subsequent variations

submitted by Gilbarco Australia Ltd,
16-34 Talavera Road,
North Ryde, New South Wales, 2113,

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

Date of Approval: 26 January 1978

The approved modifications, described in Technical Schedule No 5/6A/100 - Variation No 3 and in drawings and specifications lodged with the Commission, provide for:

1. a notice advising the users of the price-computing limitations of the 3-wheel counter-section Veeder-Root computers; and

2. a 4-wheel counter-section Veeder-Root computer.

The approval of the driveway flowmeters -

1. with 3-wheel counter-section computers will expire on 1 January 1980; and

2. with 4-wheel counter-section computers will expire on 1 January 1983.

All instruments conforming to this approval shall be marked with the approval number "NSC No 5/6A/100".

Signed

Acting Executive Officer

5/5/78

CANCELLED 0/100 23/1/80

NATIONAL STANDARDS COMMISSION

CERTIFICATE OF APPROVAL No 5/6A/100

Approved: Gilbarco Driveway Flowmeters

This is to certify that the patterns of the Gilbarco driveway flowmeters listed in Table 1 have been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade when converted to read in metric units in accordance with Appendix 14 of the General Specifications for Measuring Instruments to be Used for Trade.

Date of Approval: 8 November 1974

Conditions of Approval:

This approval is subject to review on or after 31 December 1975 to determine the extent to which the patterns may need to be modified to comply with the Commission's pattern approval requirements at the date of review.

All instruments conforming to this approval shall be marked "NSC No 5/6A/100".

Description of Pattern:

The patterns are illustrated in Figures 1 to 21 (see Table 1). They may be identified by reference to these figures and to the State approvals listed in Table 1.

Slight differences in model numbers indicate either dual models or, in the majority of cases, minor differences in the pattern (for example, in sight glass or hose arrangement) which do not affect the performance of the flowmeter as a measuring instrument.

TABLE 1.

Model	NSW	Vic	SA	WA	Figure
TCER					1
TCG (single)			38		2
CME 16					2
TCG (dual)					3
CM-S					4
CM-B					4
CM-C					4
CM-D					5
CMD-B					5
CM-N					4
CMH					4
CMH-2					4
CMK					4
CMK-2					4
CMJ					4
CMN 11					4
CMN 12	157	1, 274,	37, 37A,	151	4
CMN 13		353, 363,	37B, 37C,		4
CME 1		576	37D, 37E,		4
CME 2			37F		4
CME 3					4
CME 4					4
CME 5					4
CME 7					4
CME 8					4
CME 9					6
CME 10					4
CME 11					4
CMG					4

Table 1 (Cont'd)

Model	NSW	Vic	SA	WA	Figure
1004					7
1006					7
1002A					8
1004A					8
1004 ARC					8
1006A					8
1006 ARC	248	77, 166,	125, 179		8
1024A		258, 296,			9
1024 ARC		317, 352,			9
1026		364, 399,			10
1026A		400, 444,			9
1026 ARC		454, 459,			9
1003		481, 575,			11
1005		579, 647			11
1007					11
1007A					12
1007 ARC					12
T129B					13
T129D					14
T136					15
T142A	259	449, 530		299	16
T144A					16
T332A					17
T332AA					17
T332B					17
T332BA					17
T332C		347, 353,	189		17
T332CA		363, 456,			17
T332D		635			17
T332E					17
T332EA					17
T332F					17
T332FA					17
T334E		429	I90		18

Table 1 (Cont'd)

Model	NSW	Vic	SA	WA	Figure
T161	as described in Certificate No 5/6A/7				20
T162					21
T337					7
T338					10
T401-403					19

This approval includes the following:

1. Computers:

Veeder-Root M36 with a maximum unit-price setting of 59,9 cents/litre (see Figure 22), or 39,9 cents/litre modified to 46,6 cents/litre (see Figure 23).

Veeder-Root M56 with a maximum unit-price setting of 59,9 cents/litre (see Figure 24).

Veeder-Root 1611 with a maximum unit-price setting of 119,9 cents/litre (see Figure 25).

Veeder-Root 1613 with a maximum unit-price setting of 99,9 cents/litre (see Figure 26). The computer may have each price and quantity wheel numbered 0 to 9 and the right-hand wheels graduated and numbered 0 to 9.

Veeder-Root VR 1648 and 1649, both with a maximum unit-price setting of 99,9 cents/litre (see Figure 27).

Veeder-Root VR 101 with a maximum unit-price setting of 99,9 cents/litre (see Figure 28). The pinions on the variator are topped with pinned metal shields which prevent the segmented gears being disengaged from the pinions (see Figures 29 and 30). Metal guards attached to studs on the counter section prevent the price-posting wheels from being disengaged from the segmented price-posting gears (see Figure 31).

Veeder-Root LQ 1615, a non-price-computing indicator of quantity only (see Figure 32).

Notes: (i) The maximum speed recommended by the manufacturer for the right-hand wheel of any computer should not be exceeded.

(ii) Computers which indicate quantity only shall have each quantity wheel numbered 0 to 9 and the right-hand wheel graduated and numbered 0 to 9.

2. Final filter between the hose and nozzle (see Figure 33).

3. The delivery pipes of any submerged turbine pump being $2\frac{1}{2}$-inch diameter or less (as described in Certificate No 5/6A/34).

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/100

VARIATION No 1

Pattern: Gilbarco Driveway Flowmeters

Submittor: Gilbarco Australia Ltd,
16-34 Talavera Road,
North Ryde, New South Wales, 2113.

Date of Approval of Variation: 26 September 1975

The modifications described in this Schedule apply to the patterns described in Certificate No 5/6A/100 dated 21 November 1974.

All instruments conforming to this approval shall be marked "NSC No 5/6A/100".

The method of converting blending driveway flowmeters to the metric system of measurement advised in Certificate No 5/6A/100 dated 21 November 1974 is replaced by the method detailed below. Appendix 14 is not applicable to blending driveway flowmeters.

Description:

The approved modifications provide for:

1. The conversion of the Veeder-Root 1648 computer (see Figure 27) from the imperial to the metric system of measurement. The modifications comprise:

   (a) the overgearing of the drive from the meter to the computer changed to provide an input to the computer of 4 revolutions per litre;

   (b) the gear ratio (2 : 1) between the price spur gear in the variator and the input gear of the counter section of the computer changed to 4 : 1 by the replacement of two drive gears and the addition of two compound gears (see Figures 34 and 35);

   (c) the right-hand quantity-indicating wheel replaced by a quantity wheel with 10 graduations numbered 0 to 9;

(d) the second-from-the-right quantity-indicating wheel replaced with a wheel marked 0 to 9; and

(e) the dial face marked "litres" and "cents per litre". A decimal marker is provided between the tenths and whole litre indicating wheels.

The computer* indicates in 0,1-litre increments, giving a maximum indication of 999,9 litres, $99,99 total price.

2. A Veeder-Root 1649 computer replacing the Veeder-Root 1648 described above except for differences in the variators (see Figure 36).

3. A Veeder-Root 7525 computer replacing the Veeder-Root 1648 computer. The computer is similar to the 1648 above except for differences in the variators, and a metal guard attached to studs in the counter section preventing the price-posting wheels from being disengaged from the segmented price-posting gear (see Figures 28 and 31). The VR 101 variators are as illustrated in Figures 28, 29 and 30 except the price spur gear in the variator and the input gear of the counter section are of ratio 32 : 12 (see Figure 37).

* The maximum speed recommended by the manufacturer for the right-hand wheel of any computer should not be exceeded.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/100

VARIATION NO 2

Pattern: Gilbarco Driveway Flowmeters

Submittor: Gilbarco Australia Ltd,
16-34 Talavera Road,
North Ryde, New South Wales, 2113.

Date of Approval of Variation: 20 May 1976

The modification described in this Schedule applies to the patterns described in Certificate No 5/6A/100 dated 21 November 1974 and Technical Schedule No 5/6A/100 - Variation No 1 dated 22 October 1975.

All instruments conforming to this approval shall be marked "NSC No 5/6A/100".

The approval of the blending driveway flowmeter expires on 1 March 1977.

Description:

The approved modification provides for the right-hand quantity-indicating wheel of the Veeder-Root 1648 and 1649 computers in blending driveway flowmeters to be ungraduated after conversion to the metric system of measurement. The ungraduated right-hand quantity-indicating wheel is illustrated in Figure 27.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/100

VARIATION No 3

Pattern: Gilbarco Driveway Flowmeters

Submittor: Gilbarco Australia Ltd,
16-34 Talavera Road,
North Ryde, New South Wales, 2113.

Date of Approval of Variation: 26 January 1978

The modifications described in this Schedule apply to the patterns described in Certificate of Approval No 5/6A/100 dated 21 November 1974 and Technical Schedule No 5/6A/100 - Variation Nos 1 and 2 dated 22 October 1975 and 7 June 1976 respectively.

All instruments conforming to this approval shall be marked "NSC No 5/6A/100".

The approval of the driveway flowmeters -

1. with 3-wheel counter-section computers will expire on 1 January 1980; and

2. with 4-wheel counter-section computers will expire on 1 January 1983.

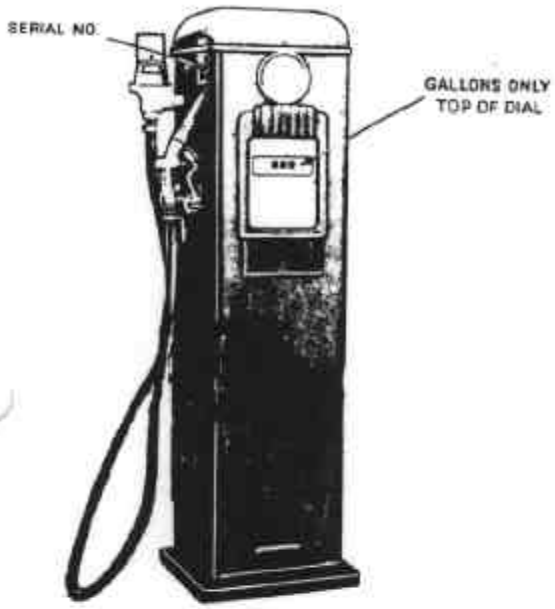
Description:

The approved modifications provide for:

1. a notice adjacent to the quantity and price indicators on each reading face of the instrument advising the user of the price limitations of the 3-wheel counter-section computers; and

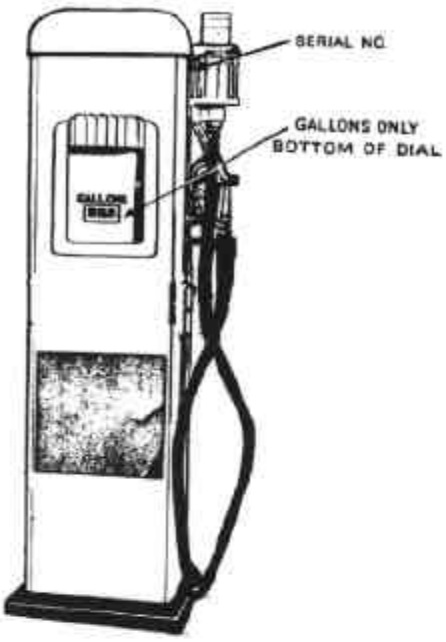
2. a 4-wheel counter-section on the Veeder-Root computer (see Figures 38, 39 and 40).

FIGURE 1



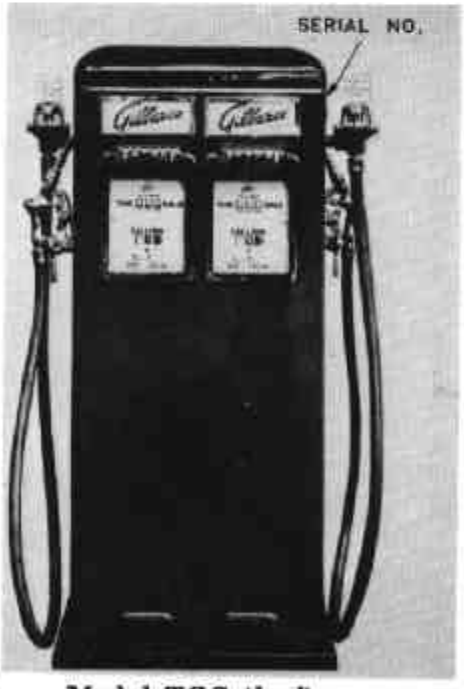
Model TCER

FIGURE 2



Model TCG (single) or CME 16

FIGURE 3



Model TCG (dual)

FIGURE 4

Model CM-S

21/11/74

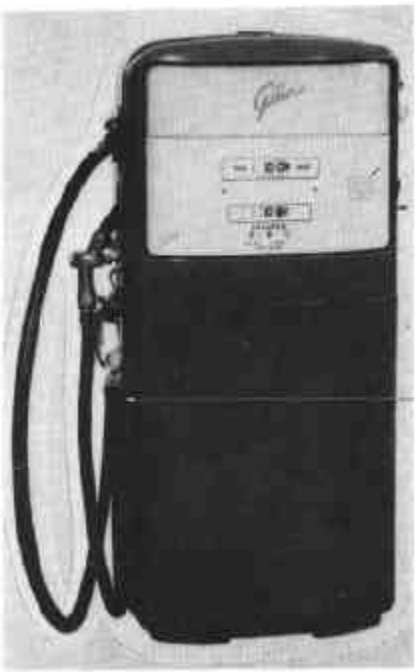
FIGURE 5

Model CM-D or CMD-B

FIGURE 6

Model CME-9

FIGURE 7

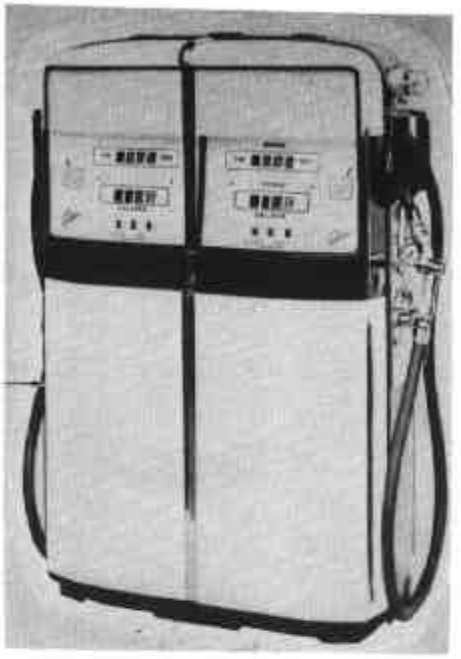


Model 1004

FIGURE 8

Model 1006A

FIGURE 9



Model 1026A

FIGURE 10

Model 1026

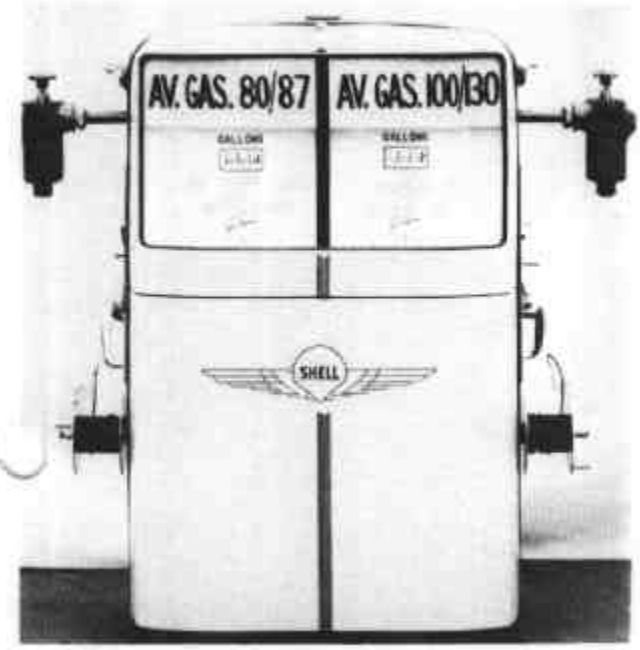
FIGURE 11

Model 1007

FIGURE 12

Model 1007A or 1007 ARC

FIGURE 13



Model T129B

FIGURE 14

Model T129D

FIGURE 15

Model T136

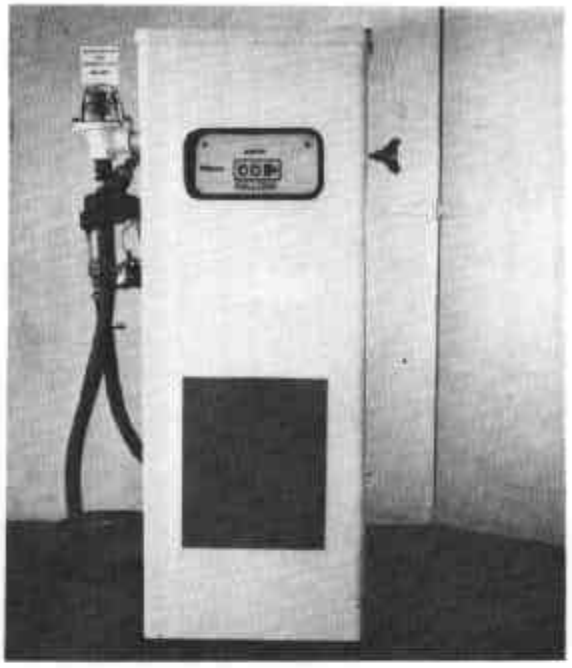
FIGURE 16

Model T142A

FIGURE 17

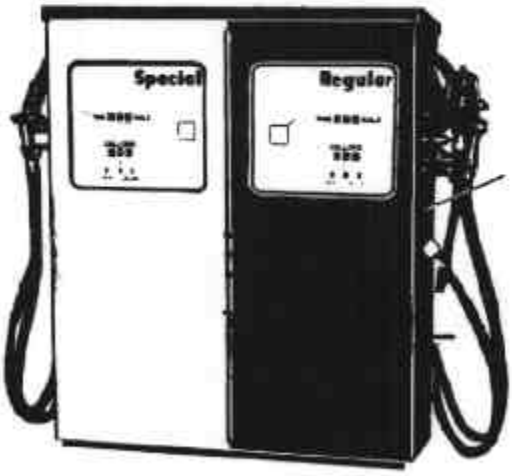
Model T332A

FIGURE 18



Model T334E

FIGURE 19



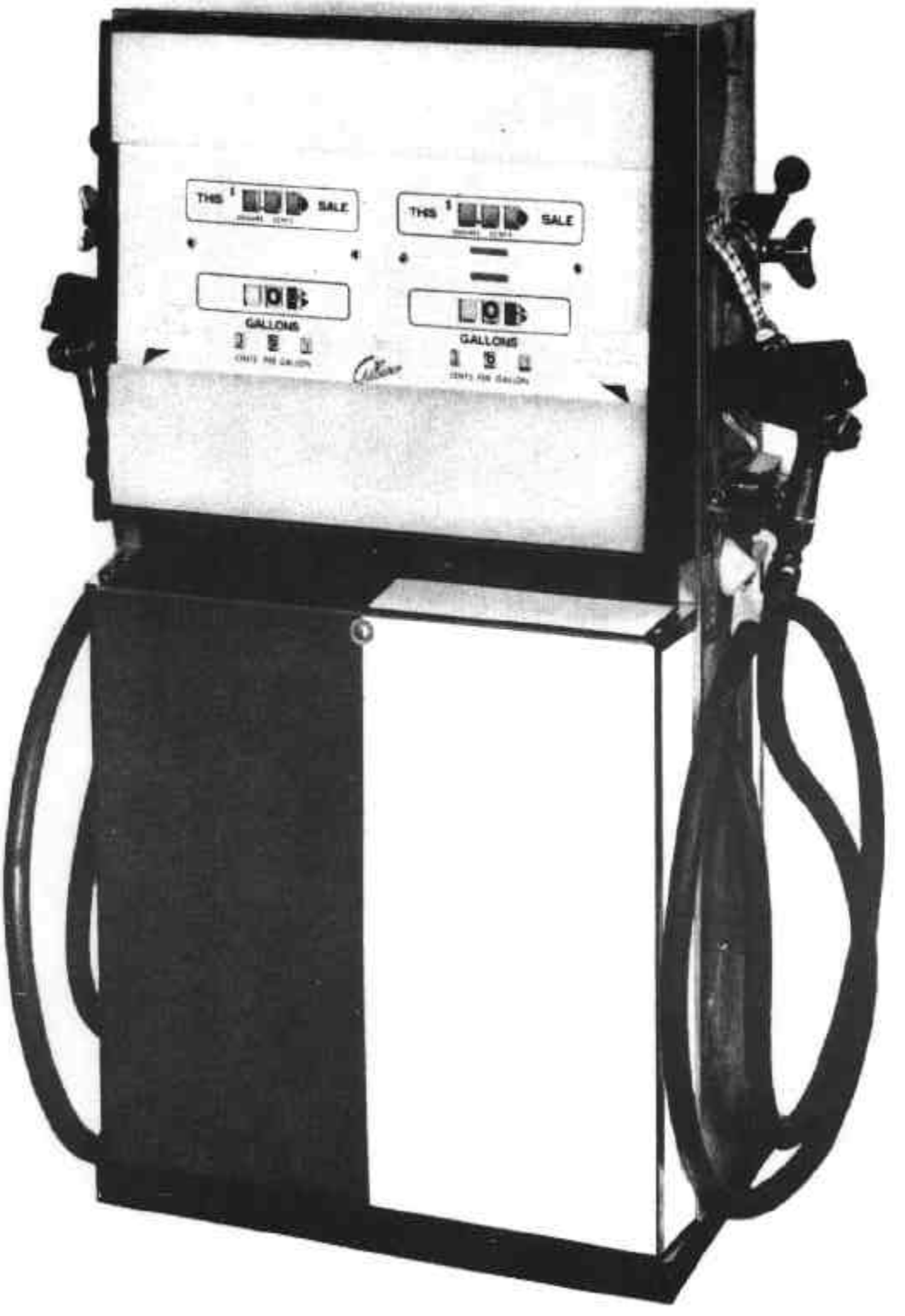
Model T401-403

FIGURE 5/6A/100 - 20

Model T161

21/11/74

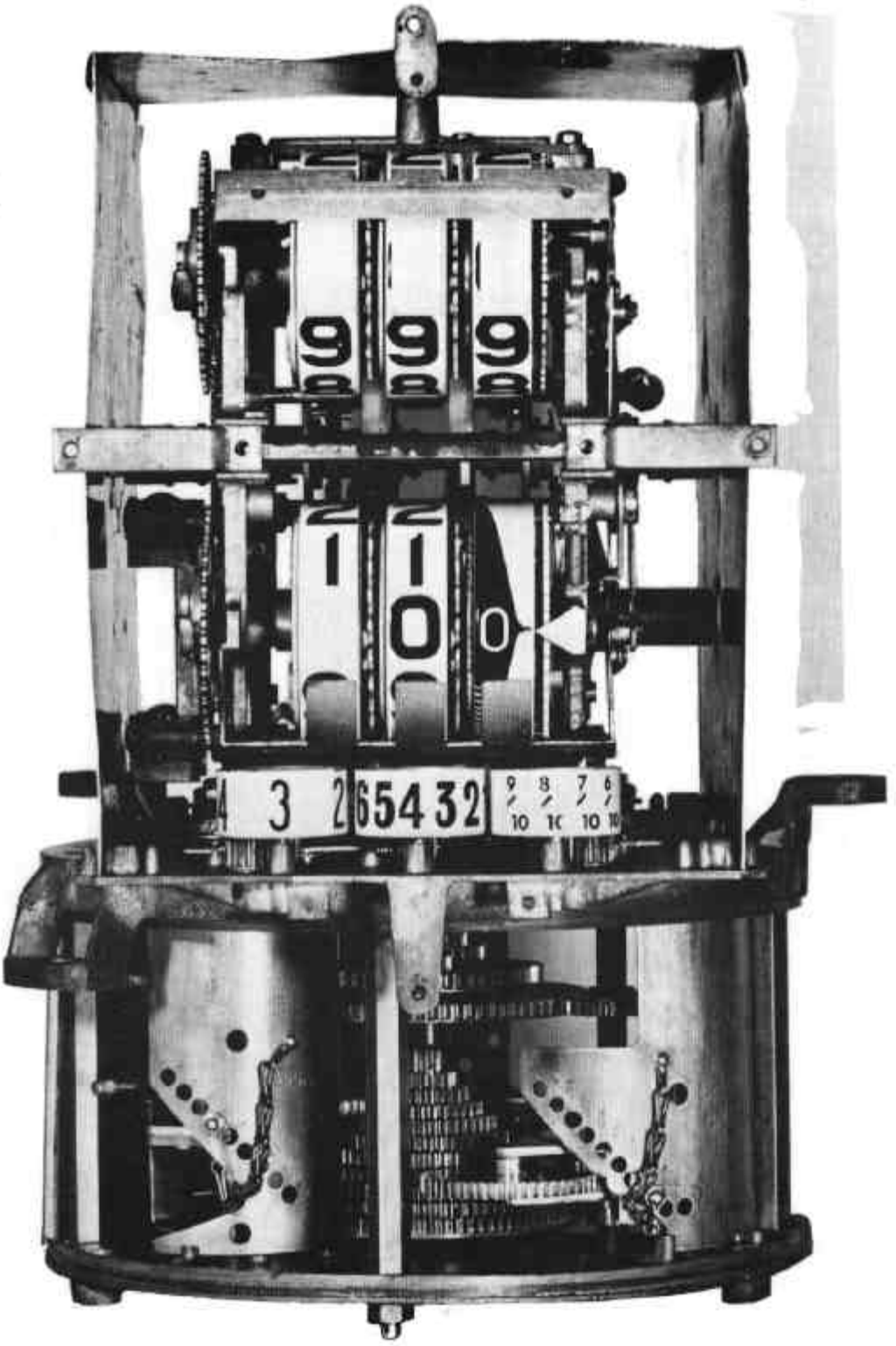
FIGURE 5/6A/100 - 21



Model T162

21/11/74

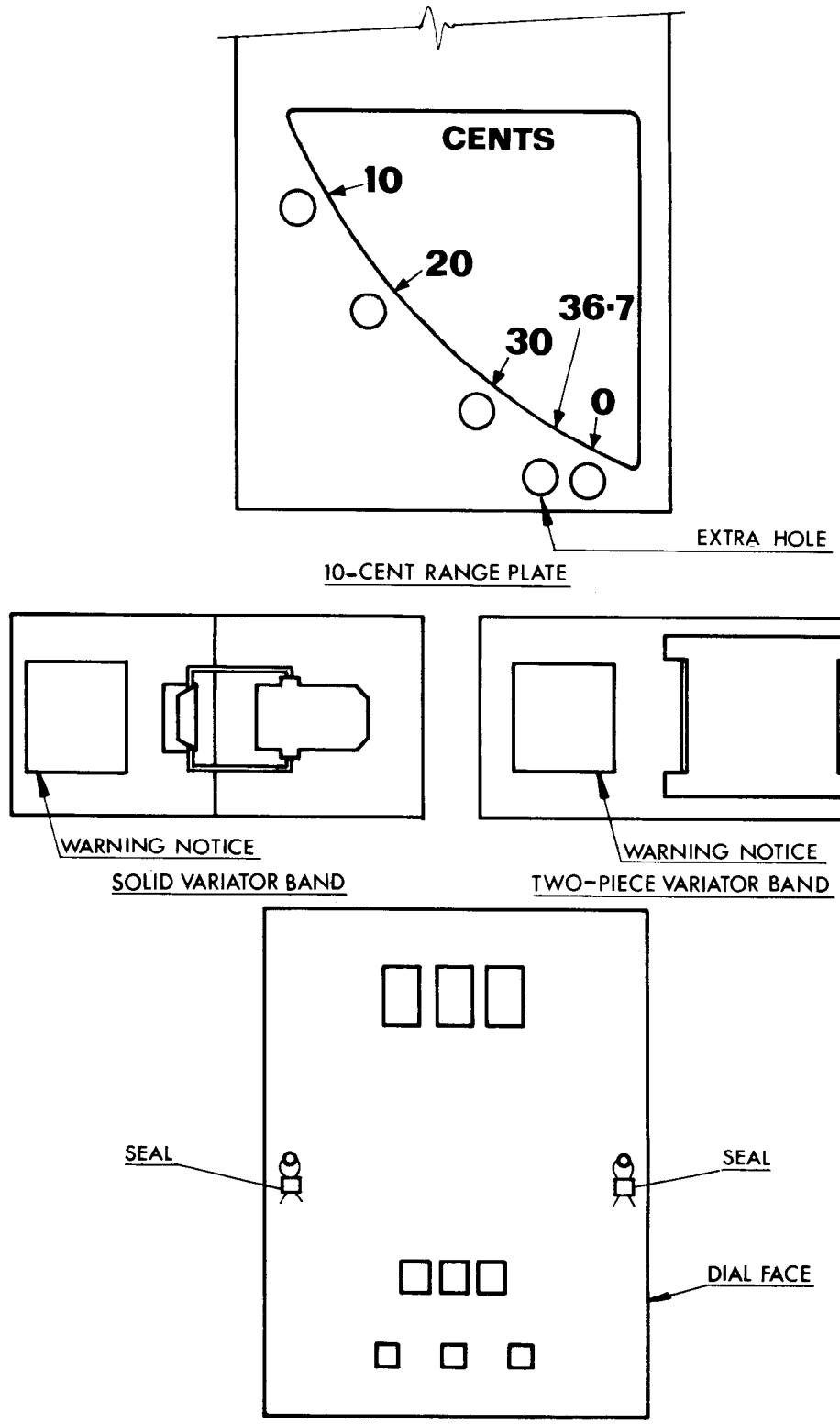
FIGURE 5/6A/100 - 22



Veeder-Root M36 Computer

21/11/74

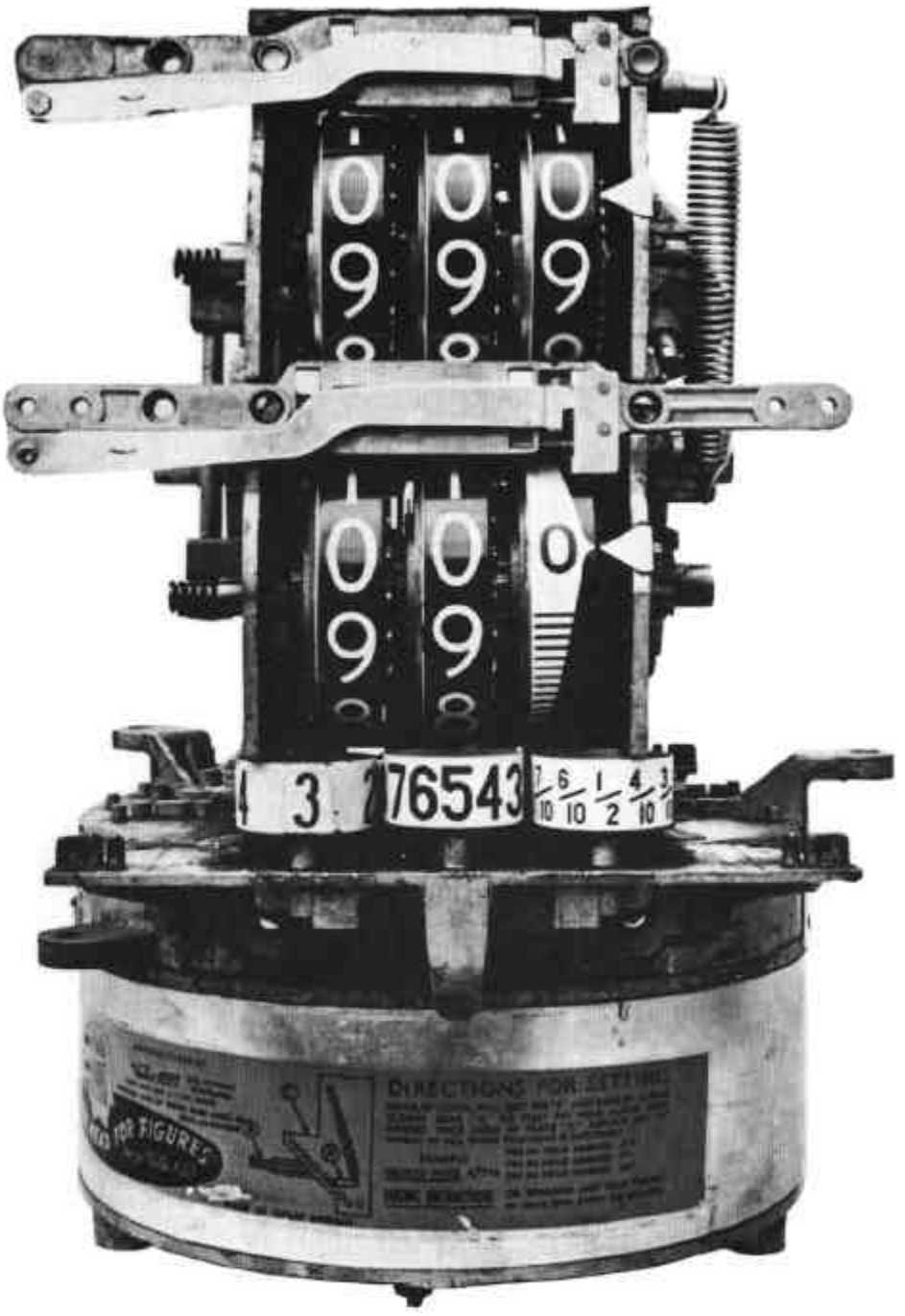
FIGURE 5/6A/100 - 23



Veeder-Root M36 Computer — Extension of Unit Price from 39,9 to 46,6 cents per litre

21/11/74

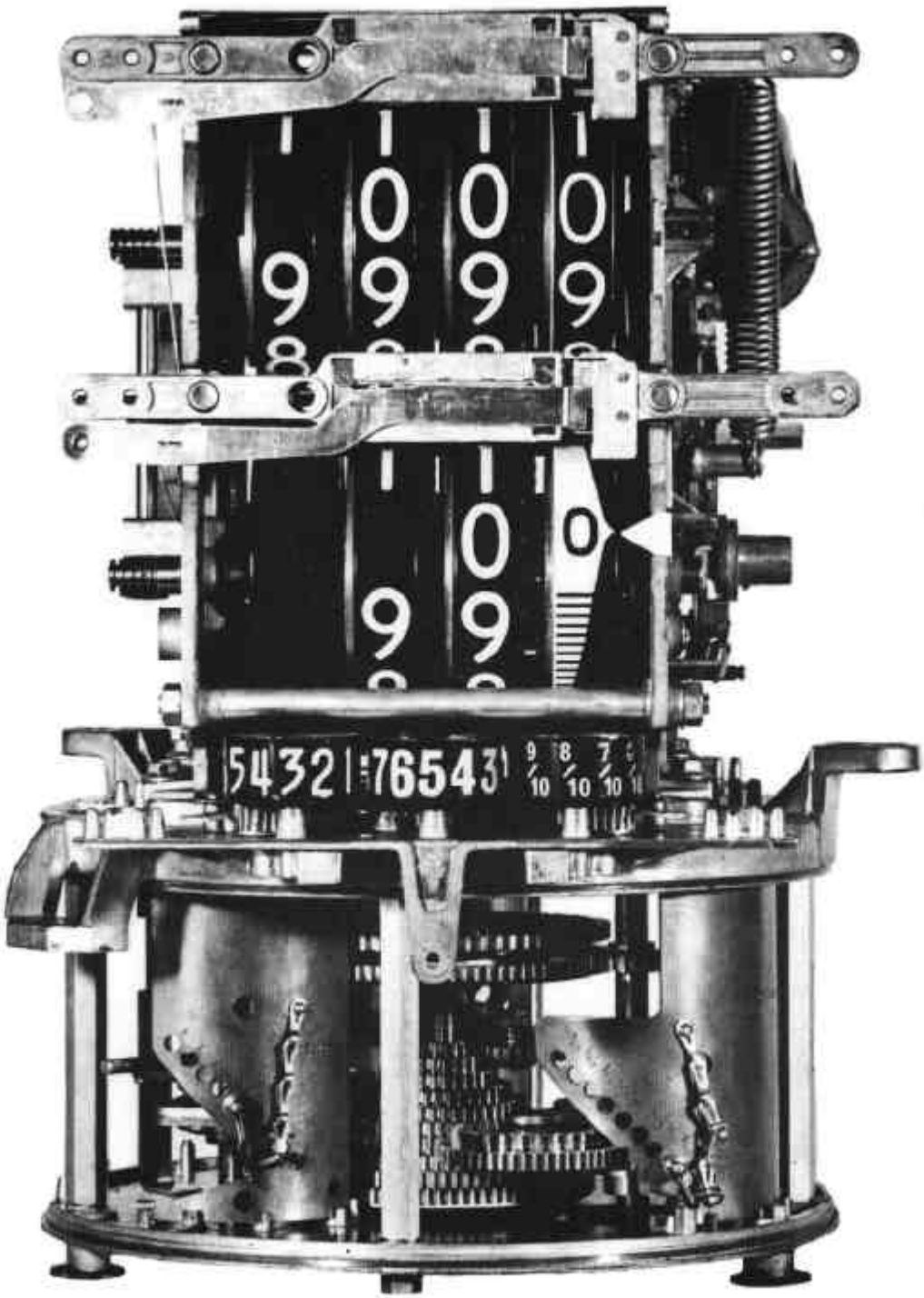
FIGURE 5/6A/100 - 24



Veeder-Root M56 Computer

21/11/74

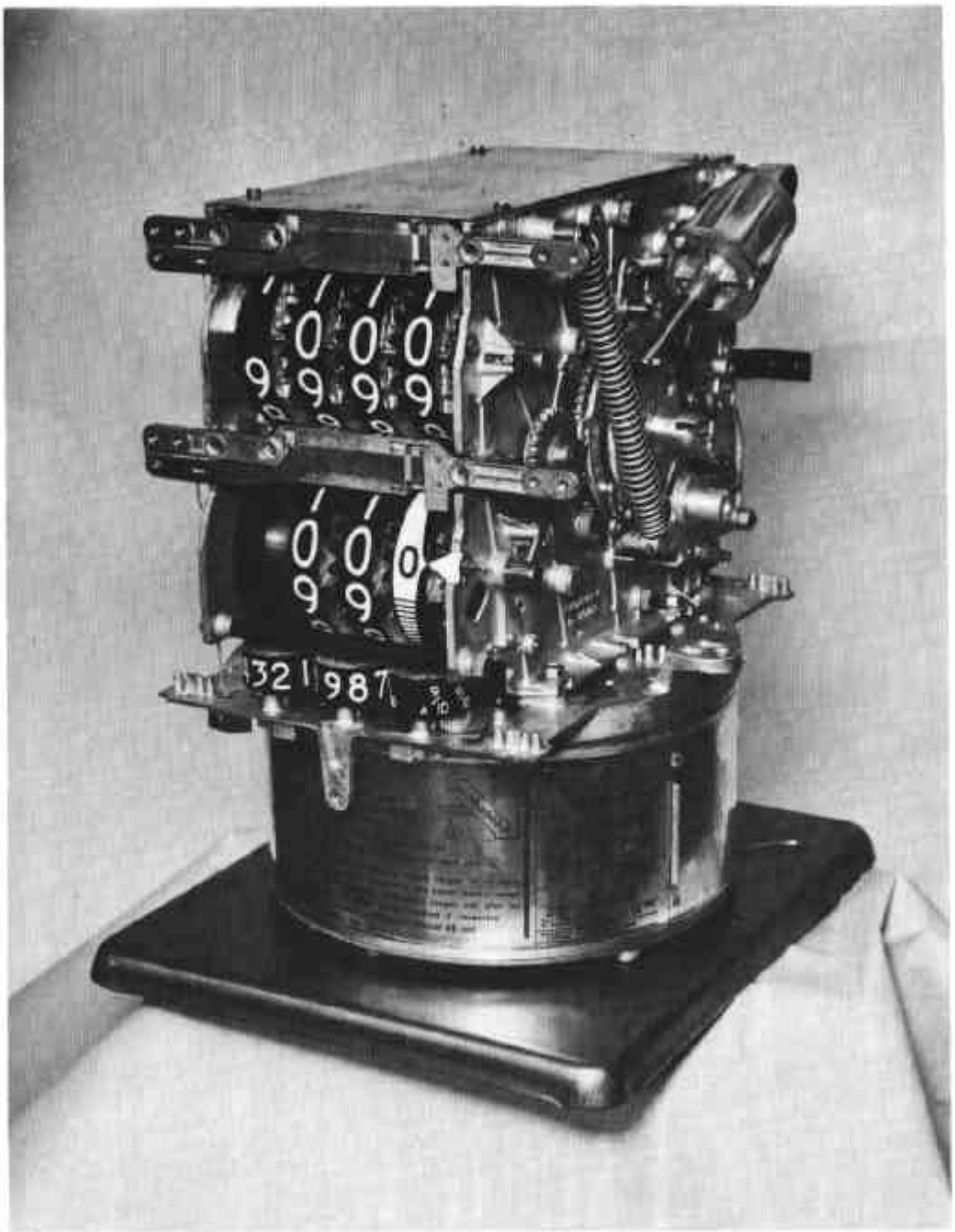
FIGURE 5/6A/100 - 25



Veeder-Root 1611 Computer

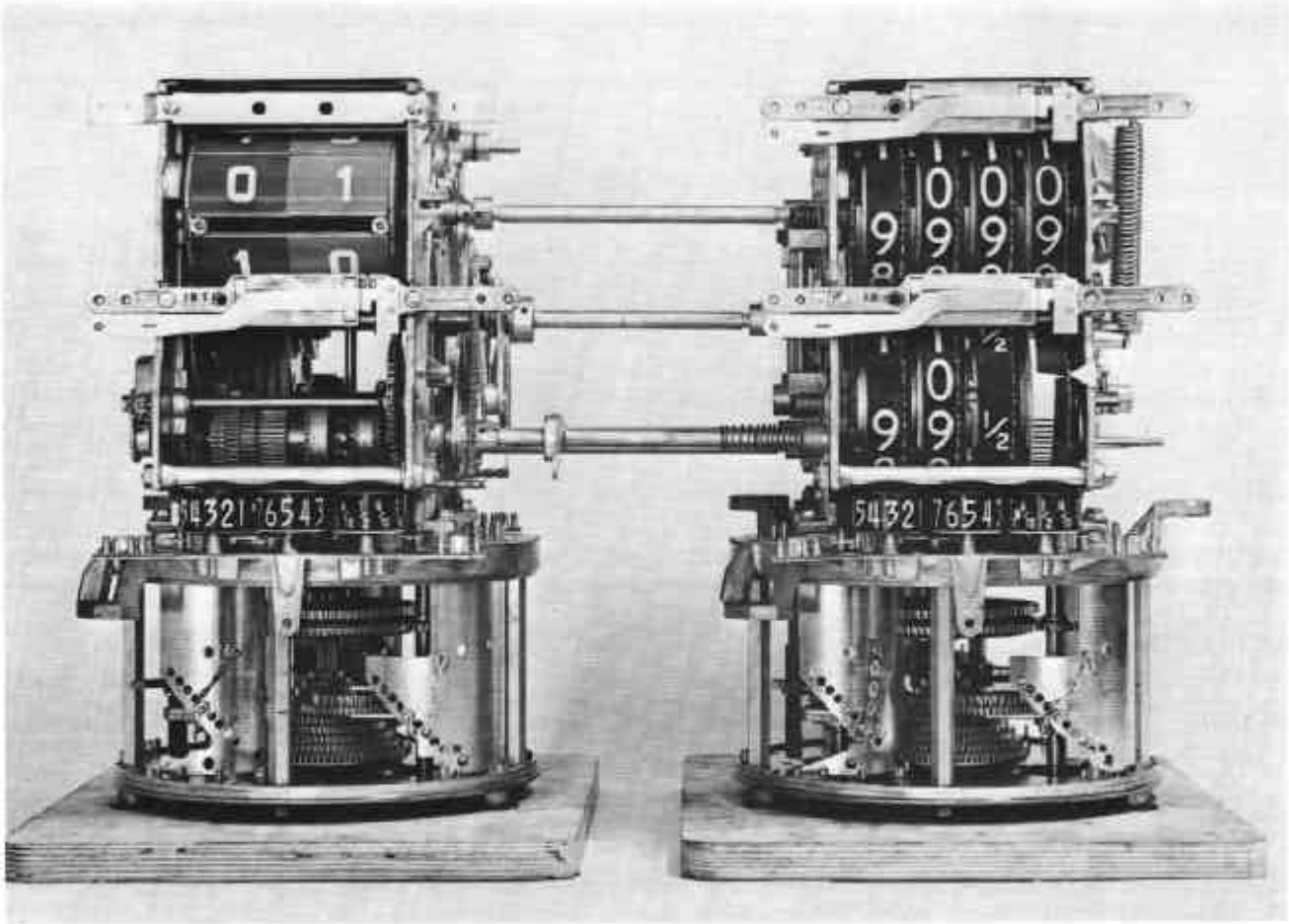
21/11/74

FIGURE 5/6A/100 - 26



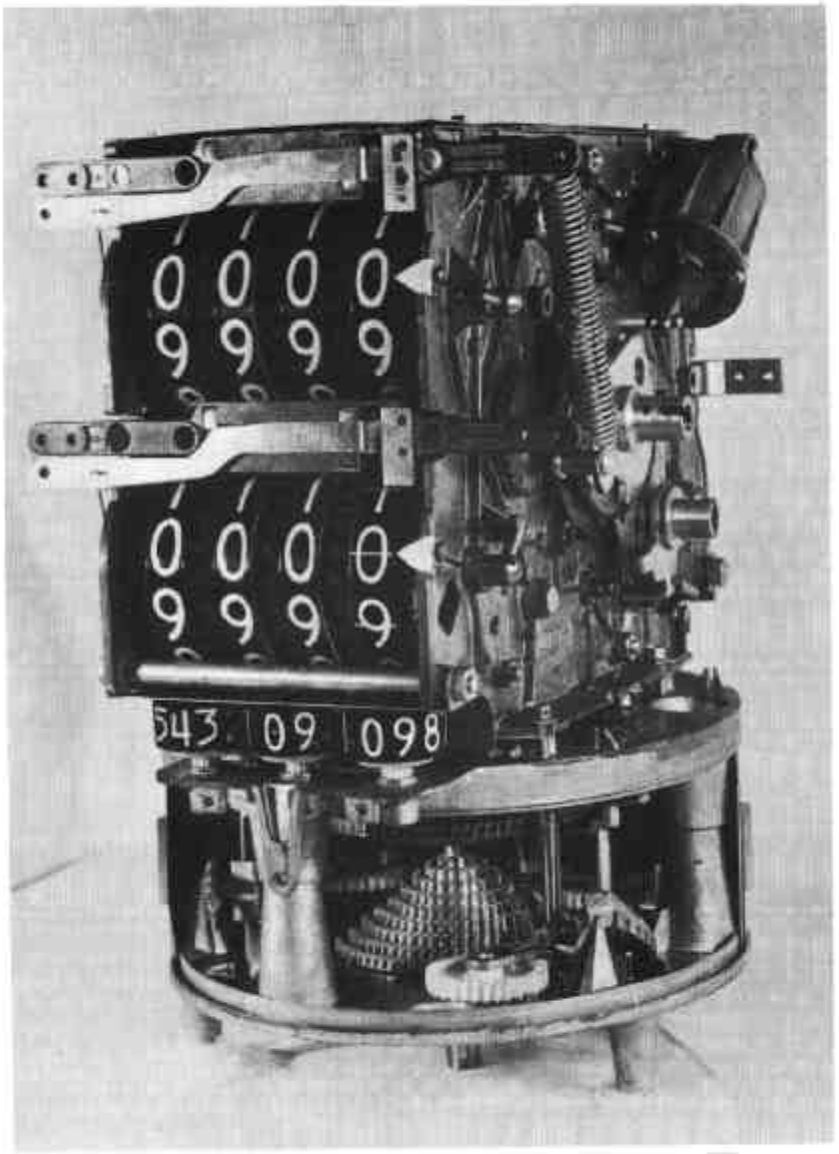
Veeder-Root 1613 Computer

21/11/74



Veeder-Root Computer Model 1648

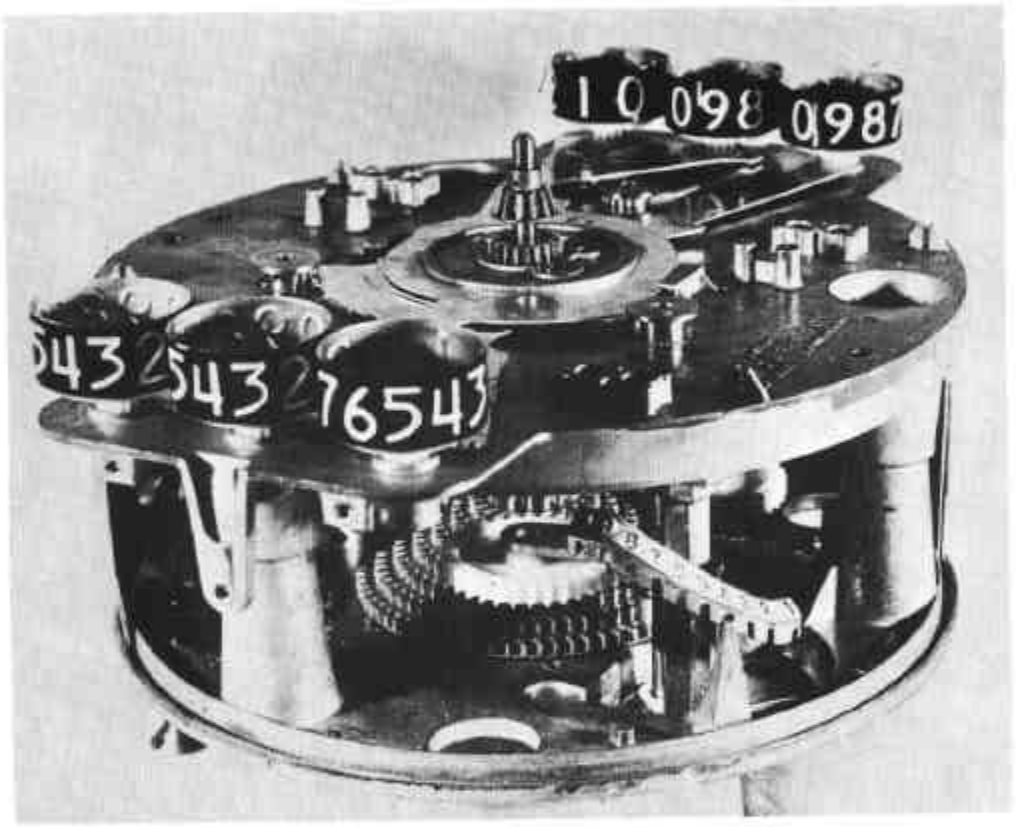
FIGURE 5/6A/100 - 28



Veeder-Root Computer Model VR 101

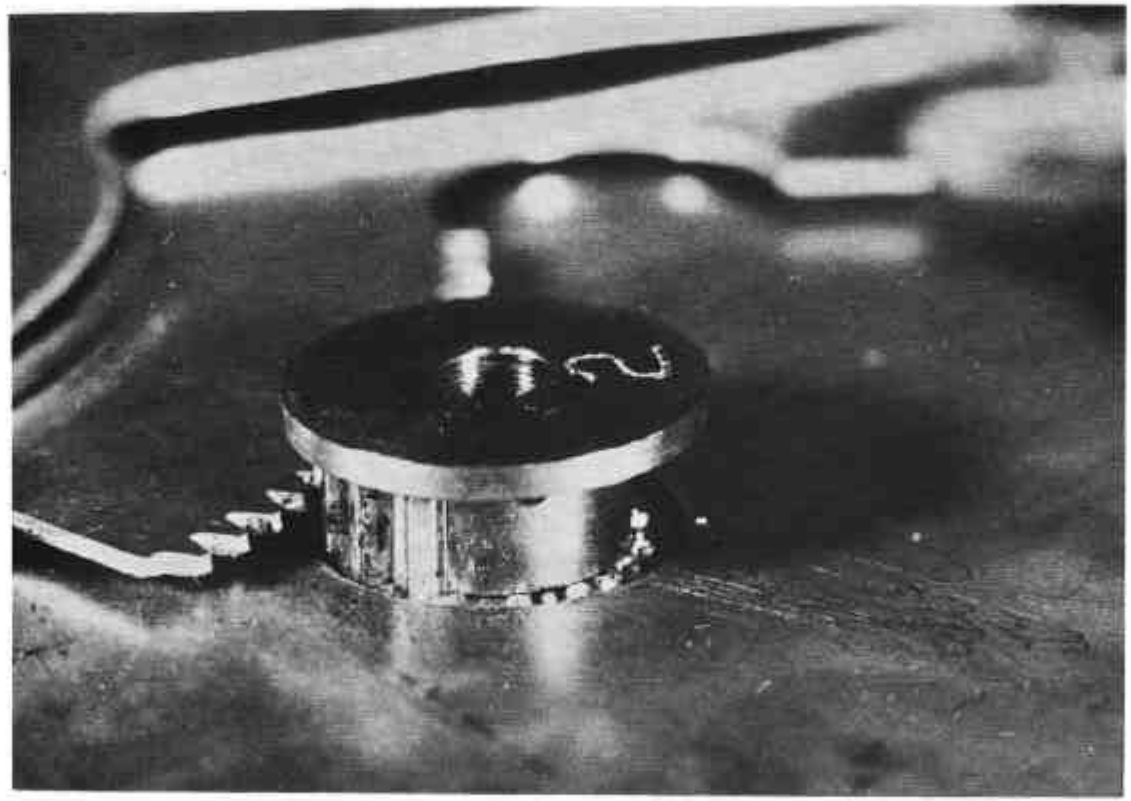
21/11/74

FIGURE 5/6A/100 - 29



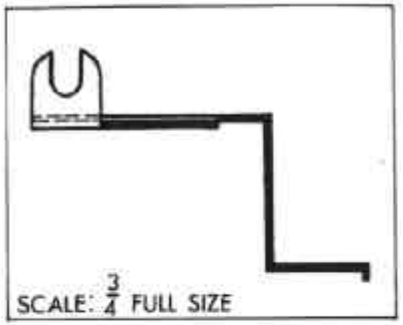
Veeder-Root Computer Model VR 101 — Variator

21/11/74



Veeder-Root Computer Model VR 101 — Pinned Shield

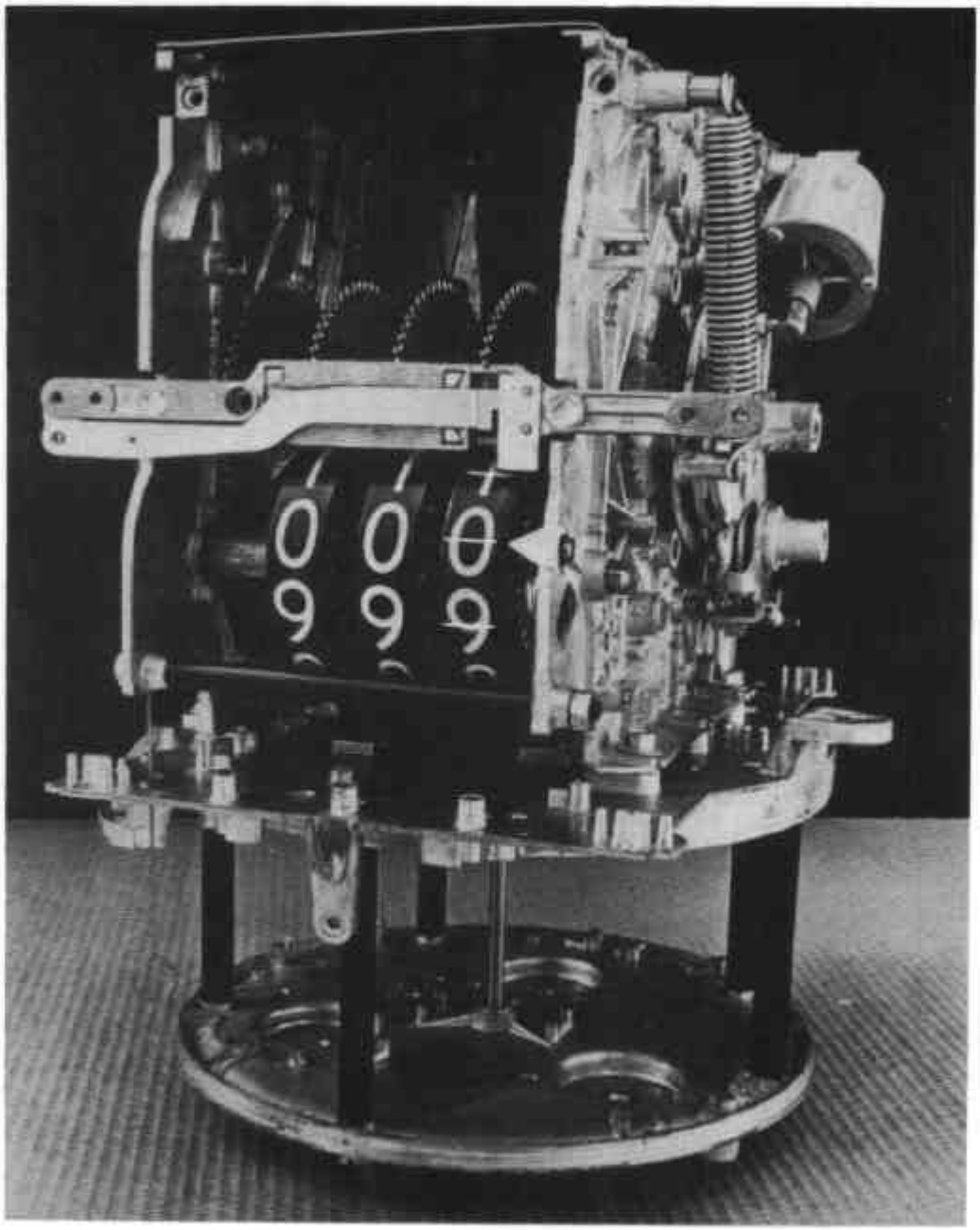
21/11/74



VIEW ON AA
SEE INSET

Veeder-Root Computer Model VR 101 — Shield for Price-posting Wheels

FIGURE 5/6A/100 - 32



Veeder-Root LQ 1615 Indicator

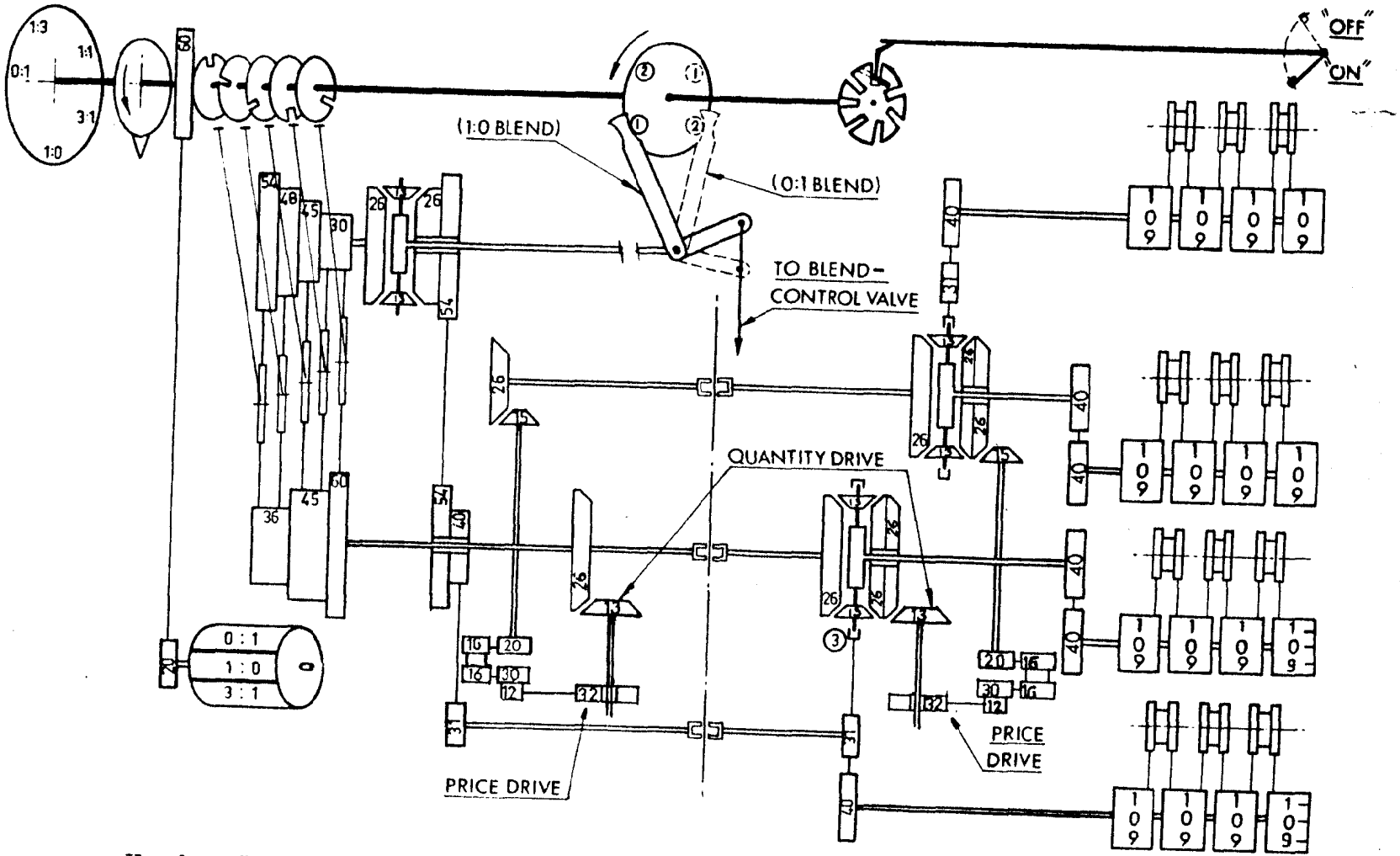
21/11/74

FIGURE 5/6A/100 - 33

Driveway Flowmeter with Final Filter

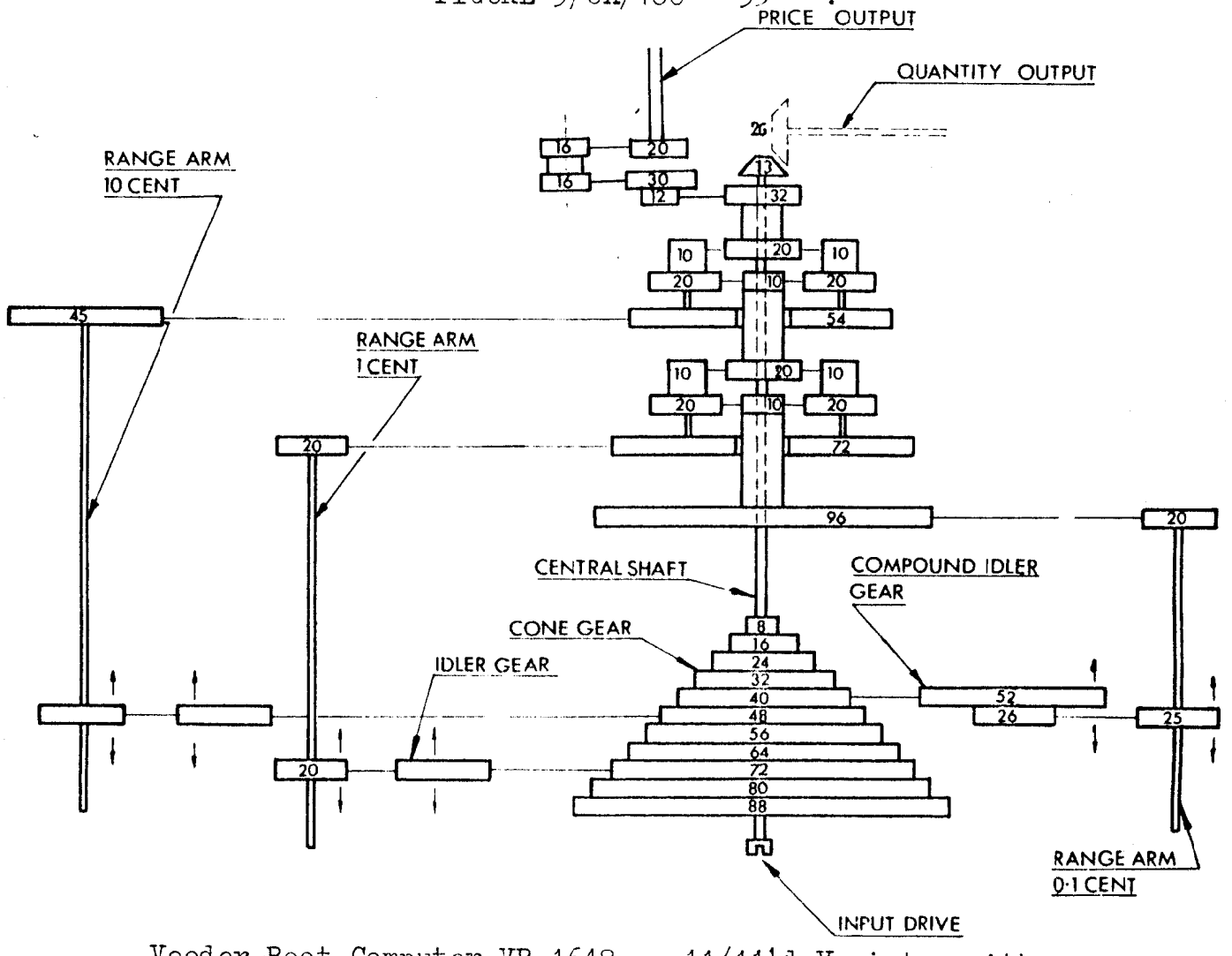
21/11/74

FIGURE 5/6A/100 - 34



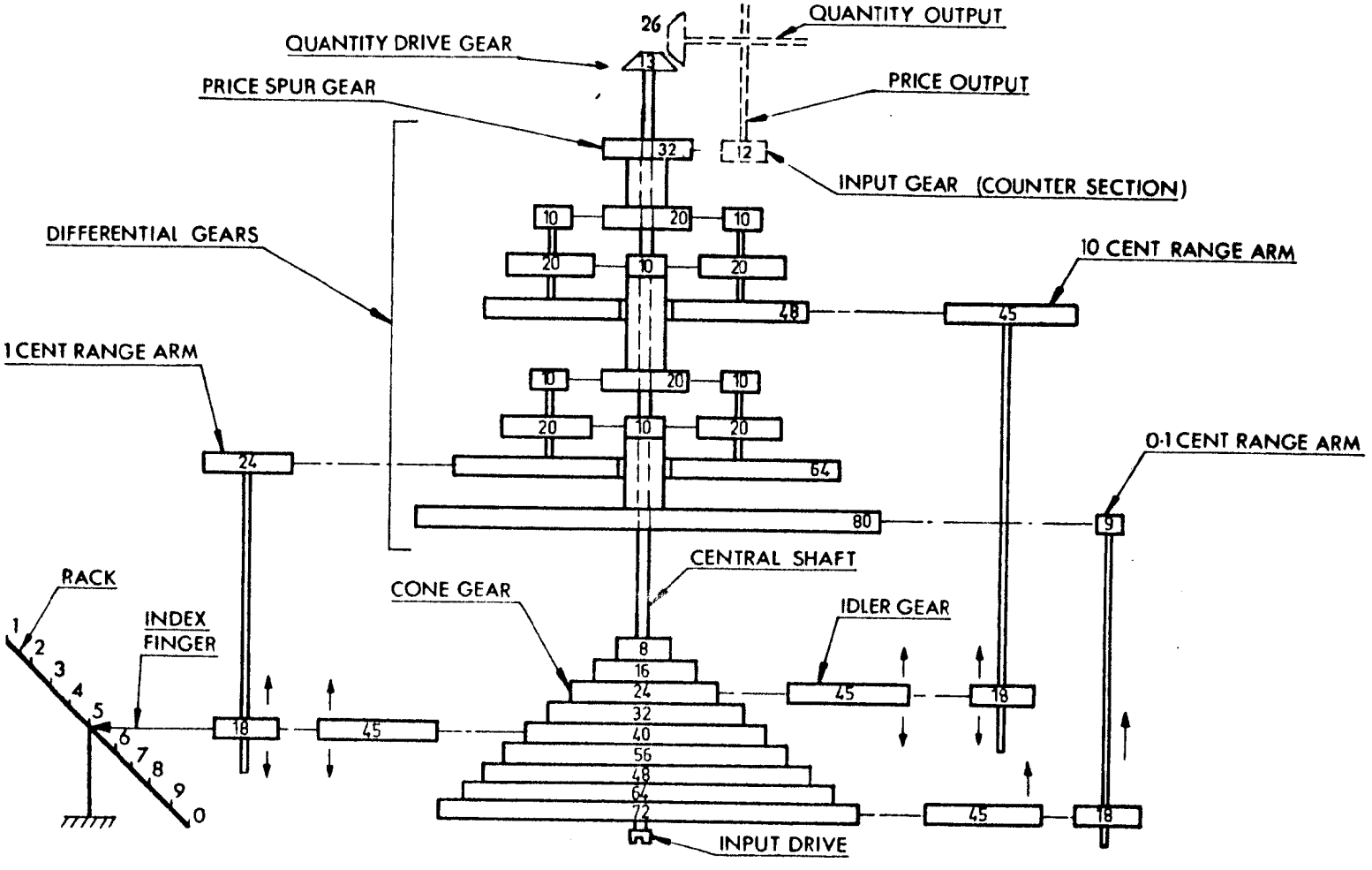
Veeder-Root Computer VR 1648 — Blend-control and Counter Sections with Changes for Metric System of Measurement

FIGURE 5/6A/100 - 35



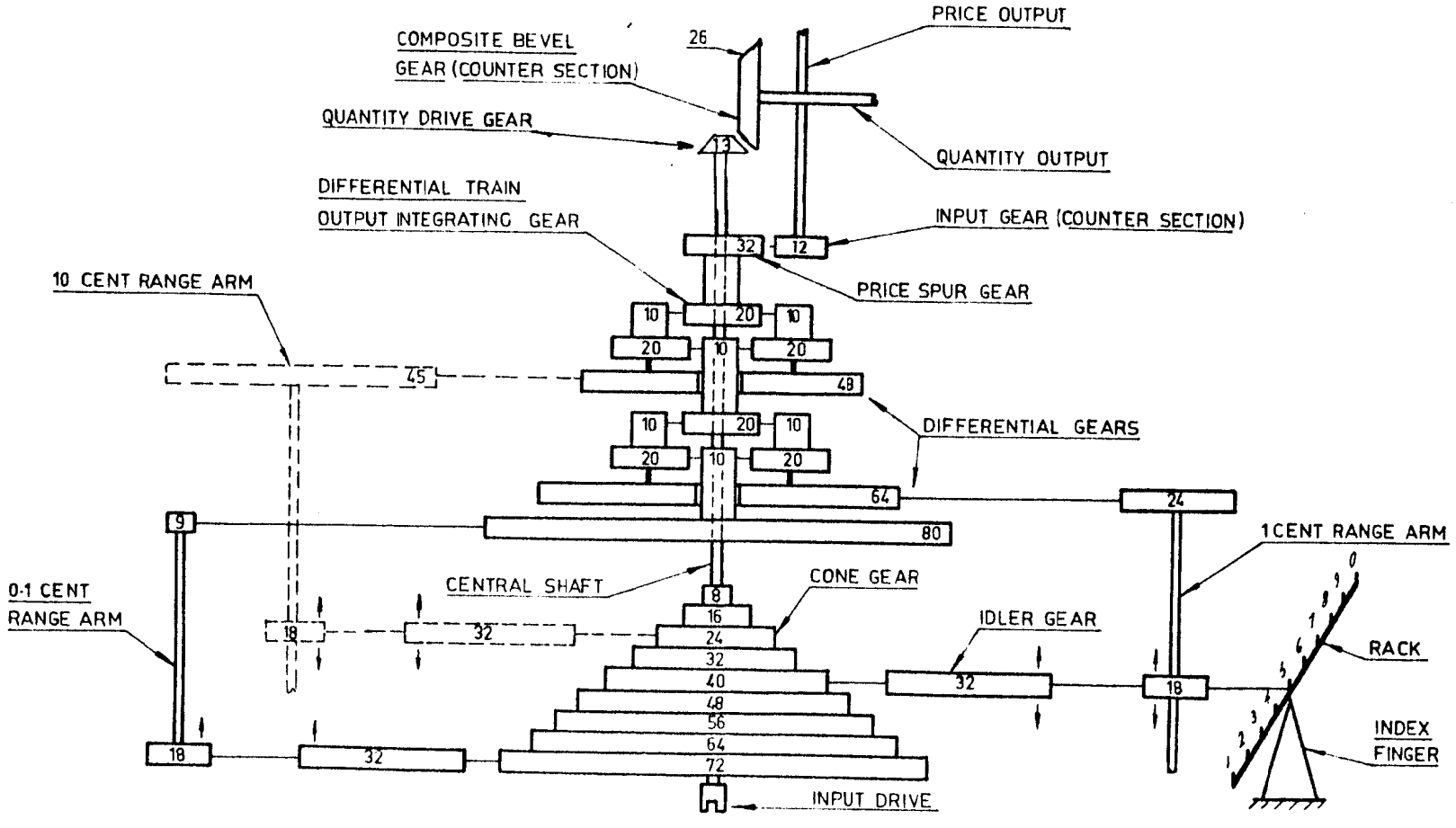
Veeder-Root Computer VR 1648 — 11/11½d Variator with
Changes for Decimal Currency and Metric System of Measurement

FIGURE 5/6A/100 - 36



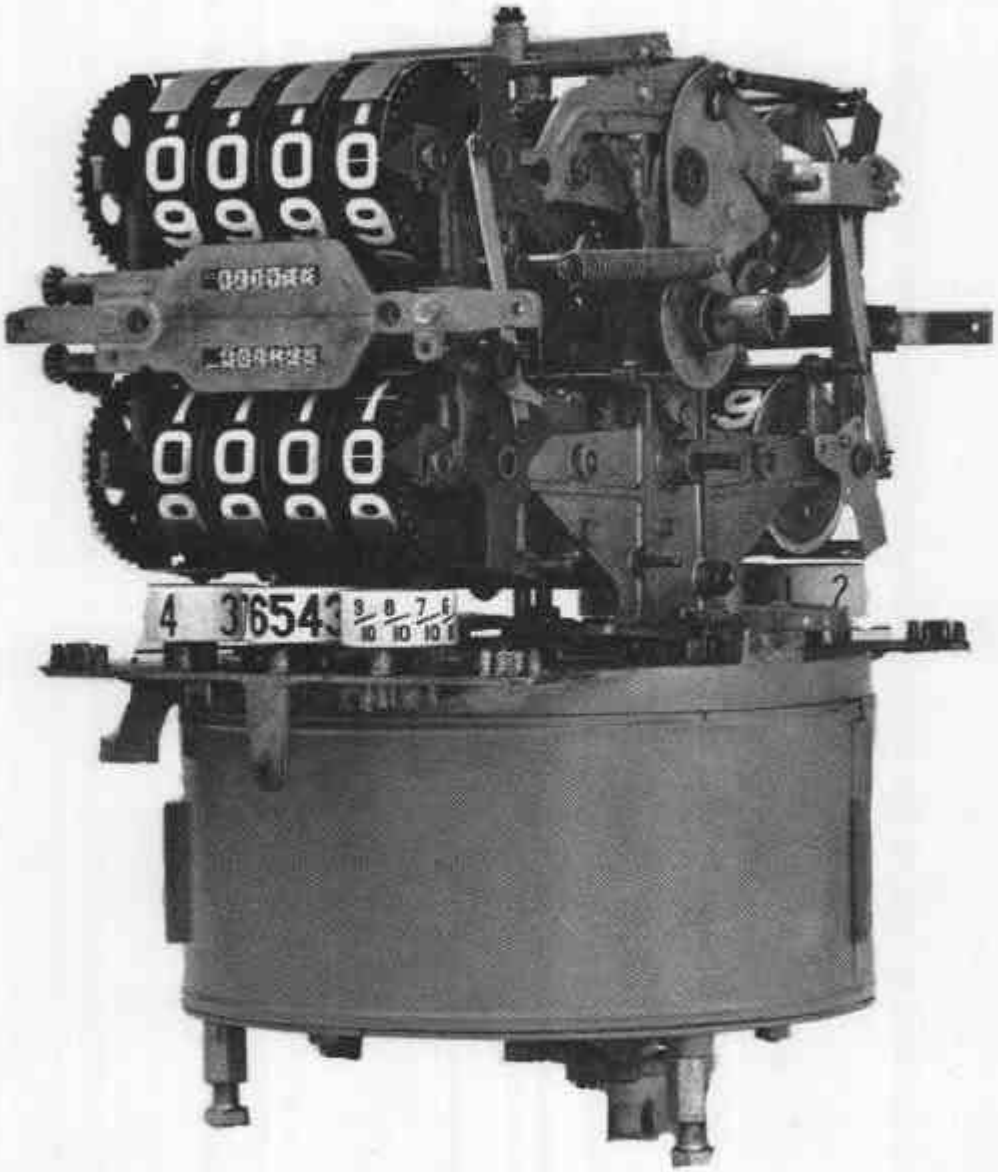
Veeder-Root 99,9-cent Variator
with Changes for Metric System of Measurement

FIGURE 5/6A/100 - 37



Veeder-Root VR 101 Variator
with Changes for Metric System of Measurement

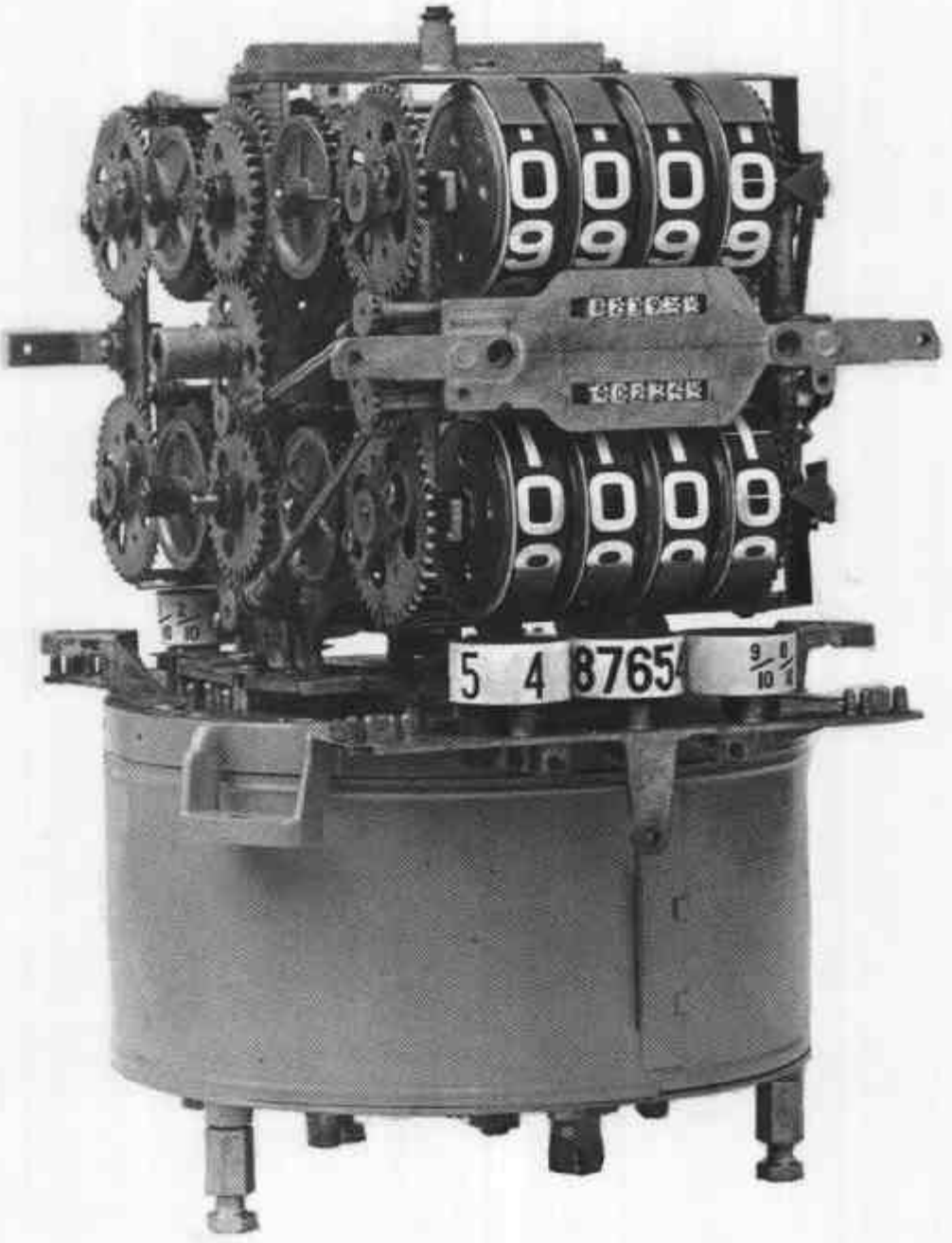
FIGURE 5/6A/100 - 38



Veeder-Root M36 Computer with 4-wheel Counter-Section

5/5/78

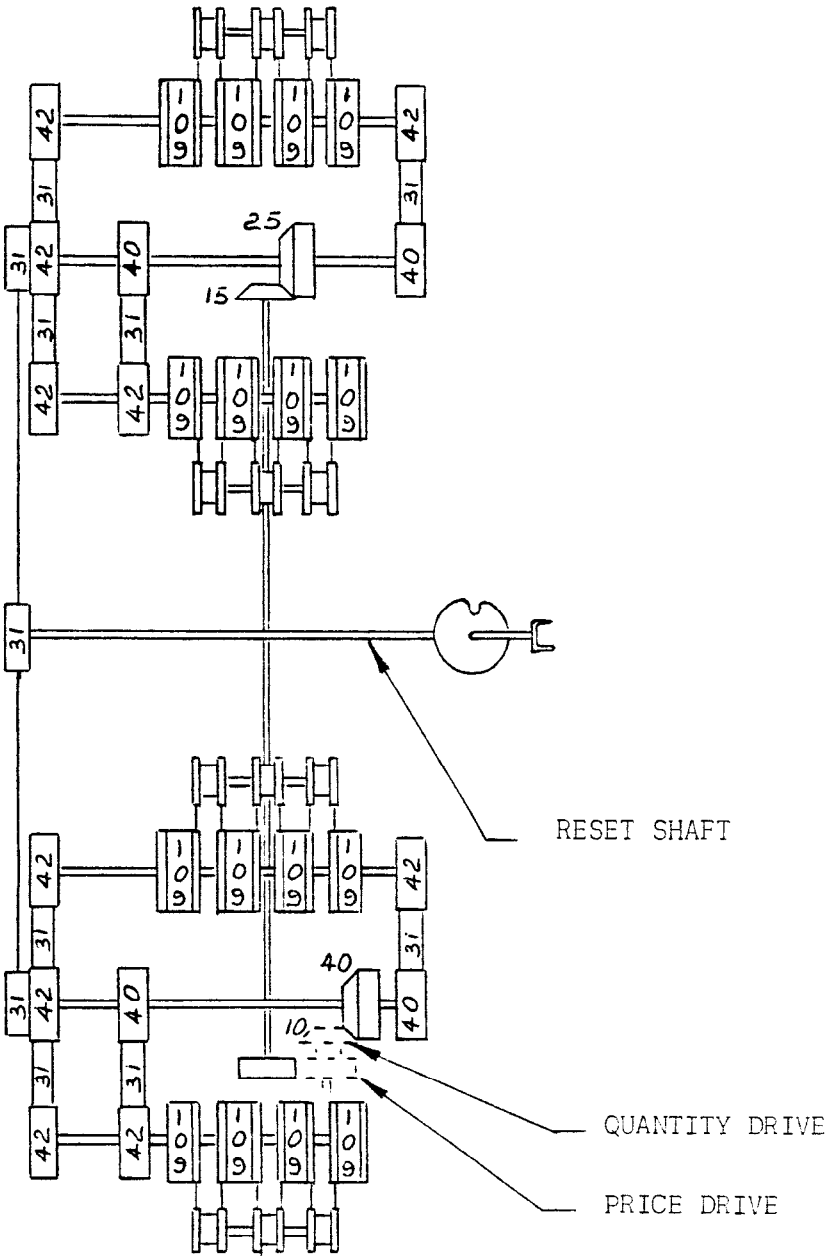
FIGURE 5/6A/100 - 39



Veeder-Root M36 Computer with 4-wheel Counter-section

5/5/78

FIGURE 5/6A/100 - 40



Veeder-Root M36 Computer 4-wheel Counter-section -
Schematic Diagram

5/5/78