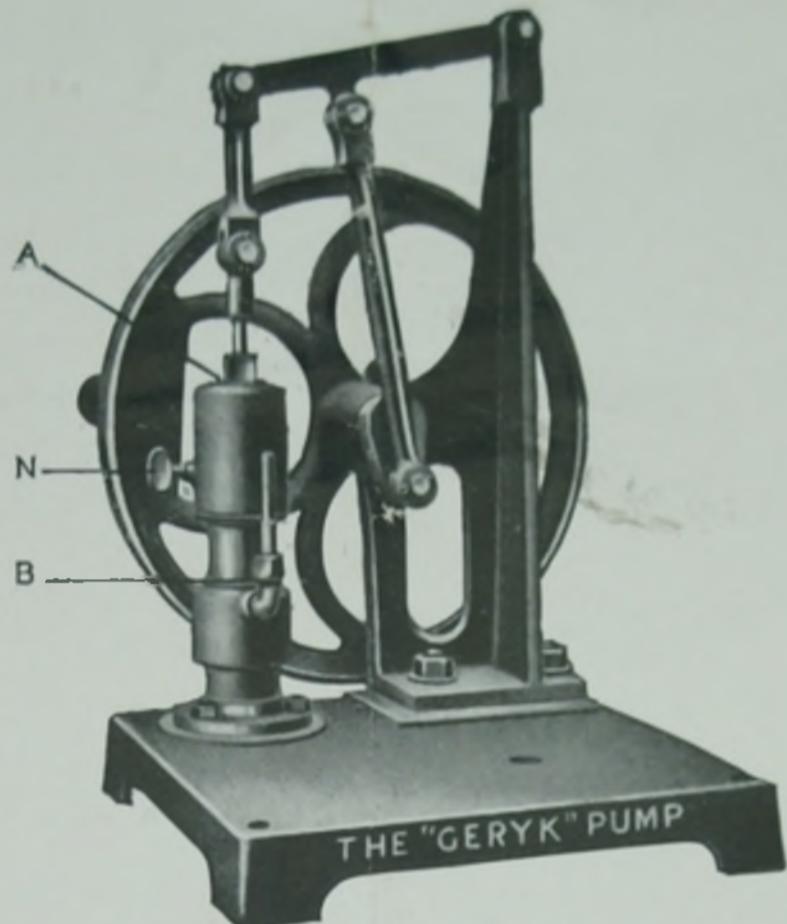


INSTRUCTIONS FOR USING “GERYK” VACUUM PUMPS

(SINGLE CYLINDER TYPE)



In these Pumps the friction is reduced to a minimum. All working joints are liquid sealed and self-adjusting, and all valves are mechanically moved so that the air meets with no resistance whatever. There is no clearance space, and therefore there is a cent-per-cent efficiency of piston displacement. The liquid used is a special oil.

There must always be sufficient oil in the pump to reach to the level of the screw plug "N" when a vacuum has been formed, and the piston is at half-stroke. To determine whether there is a proper charge of oil in the pump, unscrew plug "N" after pumping up a partial vacuum. If the chamber is not full to the point of overflow, add more oil at "A," making sure that any excess of oil is drained off at "N" before replacing the plug. The pump will then be charged for good. When once this proper charge of oil is in the pump it will last for an indefinite time. The pump is fully charged with oil before being despatched, and the above instructions are given in case any of the oil has run out by the machine being inverted in transit.

Never let any water or vapour get into the pump, and a hygroscopic substance should always be used in the vacuum receiver to dry the air.

IMPORTANT

Speed of working should not exceed 100 revolutions per minute. If worked faster the best results cannot be obtained. Should the pump oil get dirty after long use, or thick and milky on account of water or water vapour having got into the pump, it can readily be changed as follows:—Remove the suction pipe and pour oil into the socket "B," then unscrew the plug "N" and work the pump slowly. The dirty oil will overflow at the plug hole and more clean oil can be poured into the socket "B" and the pump again worked as before, until the oil which overflows at "N" is no longer dirty.

These single-cylinder pumps are capable of giving a vacuum of 1/50th of a millimetre off perfect on a closed dry circuit.

ENLARGED DETAIL OF
END OF IMPULSE LEVER, IMPULSE WHEEL,
CATCH & PALLET PENDULUM IN ZERO POSITION

SCALE - 5 TIMES FULL SIZE

These lines intersect at
centre of suspension of
pendulum

16 cm to
centre of suspension
of pendulum

3 mm
RADIUS

These lines
intersect at centre
of pivot of impulse
lever.

16½ mm

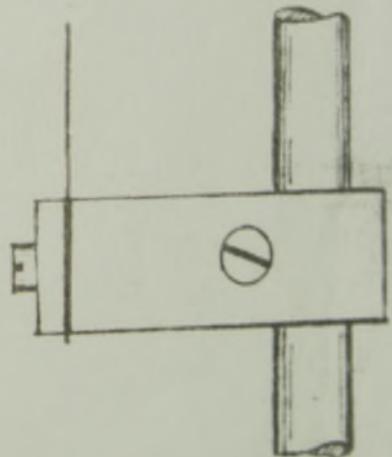
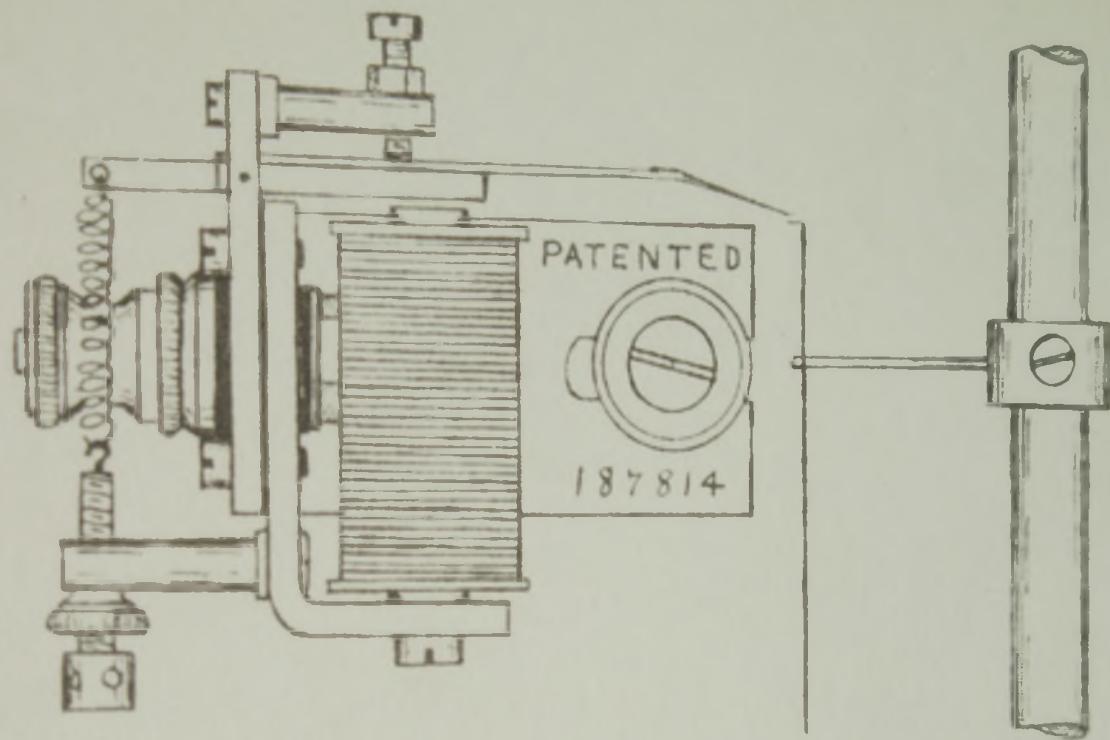
1¾ mm

Position of wheel at
each end of a total
swing of 100 minutes
arc.

0 5 10
SCALE OF MILLIMETRES

4/4

191229



ANGLO DAL LTD. (VARINEX)

Consignment of Sidereal Clock No. 98 and B type slave
clock and other accessories

Case No. 5

46" x 22" x 22"

Gross weight - 1cwt. 2qrs. 20lbs.
Nett weight - 2qrs. 22lbs.

1 - copper cylinder Free Pendulum
case. ✓

Case No. 6

63" x 26" x 19"

Gross weight - 1cwt. 5qrs. 3lbs.
Nett weight - 2qrs. 14lbs.

1 - B type slave clock ✓
1 - box containing free pendulum
rod with parts fitted on. ✓
1 - box containing slave pendulum
rod with parts fitted on. ✓

Case No. 7

46" x 40" x 28"

Gross weight - 2cwt. 2qrs. 14lbs.
Nett weight - 3qrs. 18lbs.

1 Box containing:
✓ 1 - Free Pendulum movement.
1 Box containing:
✓ 1 - heavy resetting lever ✓
✓ 1 - gravity lever with heavy weight
fitted.
✓ 1 - gravity lever light weight. ✓

1 Box containing:
✓ 1 - Free Pendulum carriage ✓
✓ 1 - Free Pendulum suspension spring. ✓

1 Box containing:
✓ 1 - Condenser Unit ✓
✓ 1 - Special beat plate ✓
✓ 2 - boxes of regulating weights. ✓
✓ 1 - movement support bracket. ✓
✓ 1 - case valve
✓ 1 - set of 3 wires S.E. & P. ✓

1 Box containing:
✓ Mercury and oil gauge on bracket ✓
with fixing screws.

1 Box containing:
Triangle frame with microscope
fitted, also fixing screws. ✓
1 - plate glass circle. ✓

1 Box containing:
1 - Four legged casting with fixing
screws and damping plate. ✓

1 Box containing:
1 - Glass bell jar ✓

MEMORANDUM ON THE MICROSCOPE AND SPECIAL
BEAT PLATE.

Adjusting screws are fitted to the special beat plate in order to enable the scale to be adjusted so that the image is seen in the microscope as passing from left to right or vice-versa, without any back to front motion, in other words, the engraved scale must be exactly in line with the plane of swing of the pendulum.

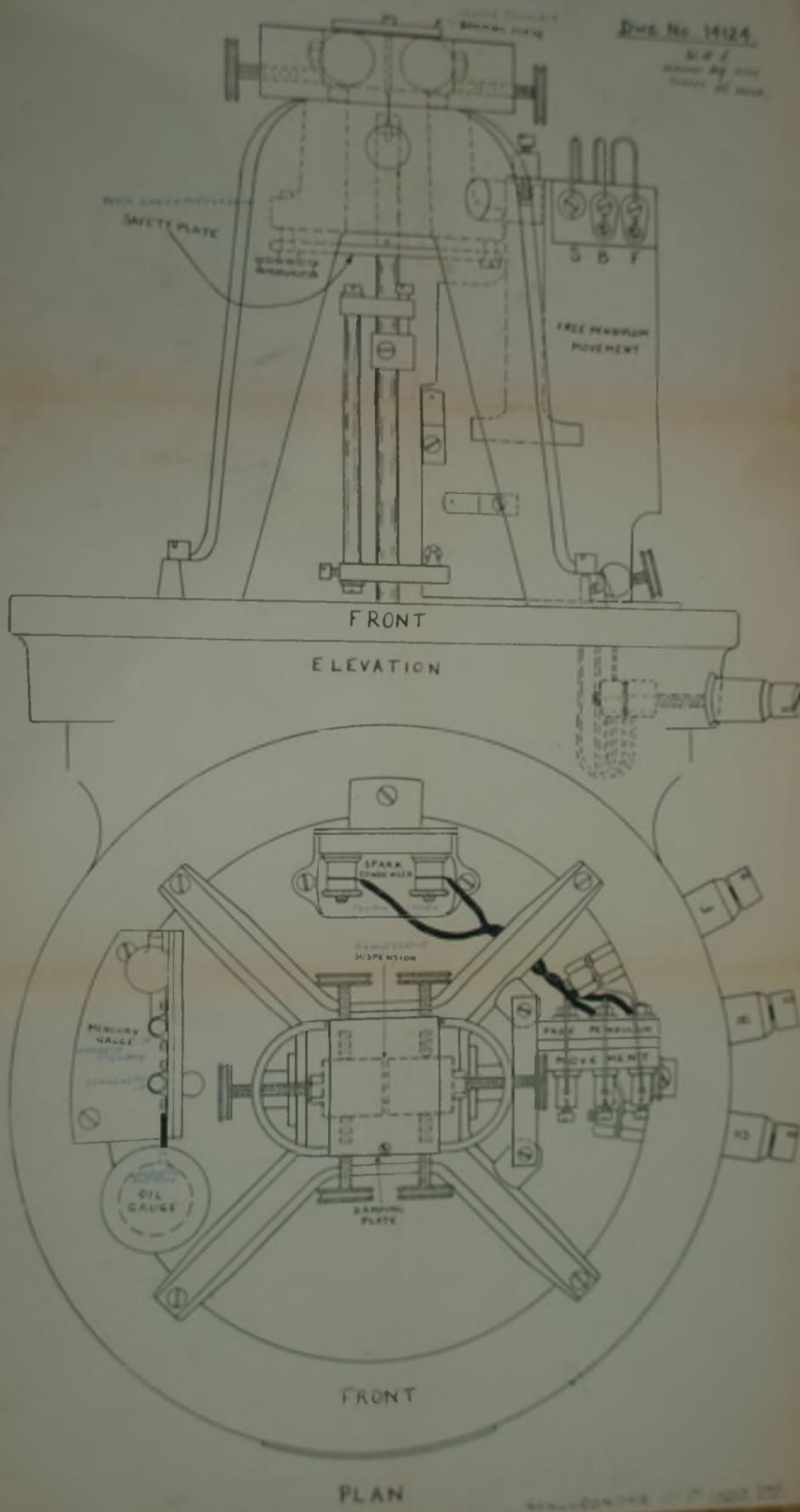
The microscope will be found already fitted to the triangle casting, and only needs to be placed in position, focussing and adjusting may then be done as follows:-

1. The pendulum should be in a stationary position.
2. Place an electric light about 3 inches below the glass plate about 3 inches to the right or left of the microscope and in line with the beat plate.
3. Turn the traversing screw at the back end of the microscope either way until the engraved lines on the beat plate come centrally into view, move the light about and focus the object lens until the best result is obtained, which should be when the lines on the beat plate show up clear and bright.
4. Now move the microscope from right to left or vice-versa by means of the traversing screw provided for that purpose, until the zero line of the beat scale is on the centre line of the eye-piece scale.

Having now exactly located the position of the microscope relative to the beat plate, tighten up the three milled head screws on the front ring through which the microscope tube passes, and tighten up the milled nut on the cross traverse.

The arc can now be measured by reference to the print 211229.

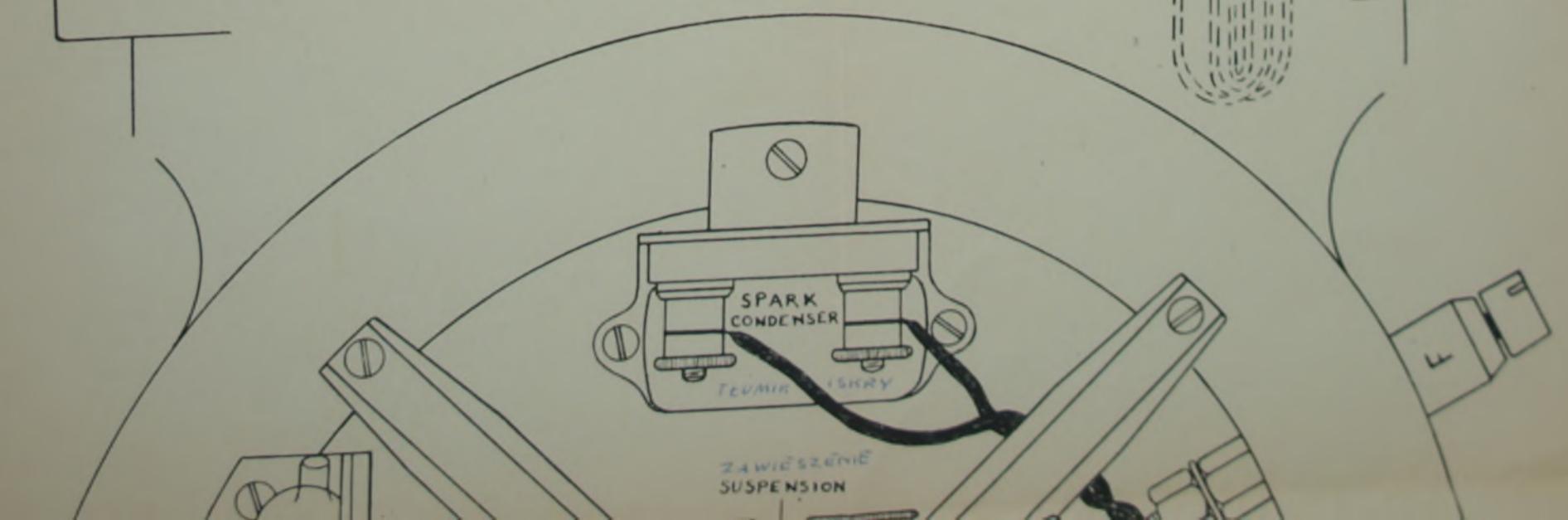
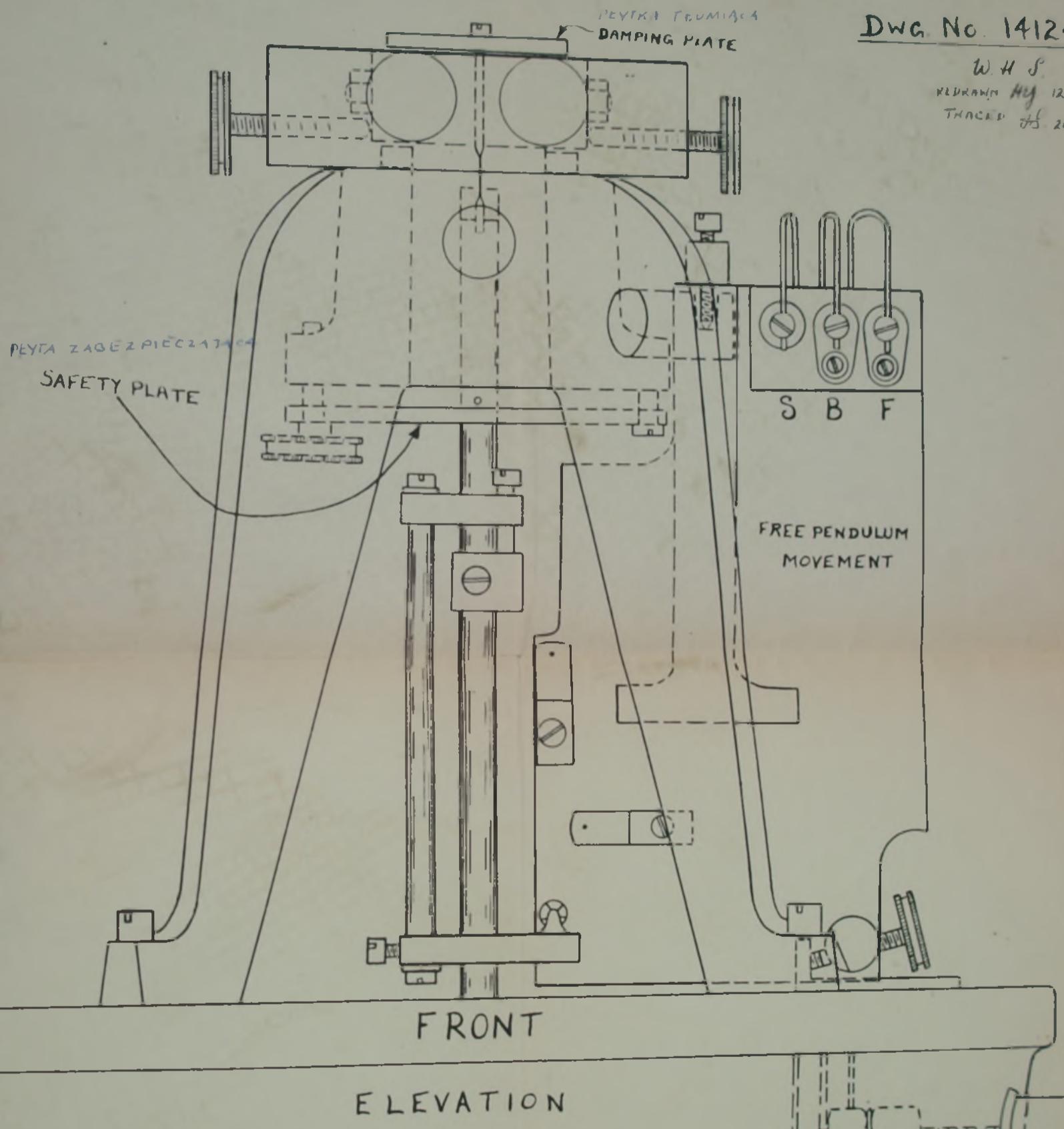
DETAILS OF THE FOUR LEGGED HEADCASTING.
ARRANGEMENTS OF SUPPORTING THE MOVEMENT,
SPRINGS FOR MOVEMENT AND PENDULUM,
BASE TERMINALS AND ELECTRICAL CONNECTIONS.

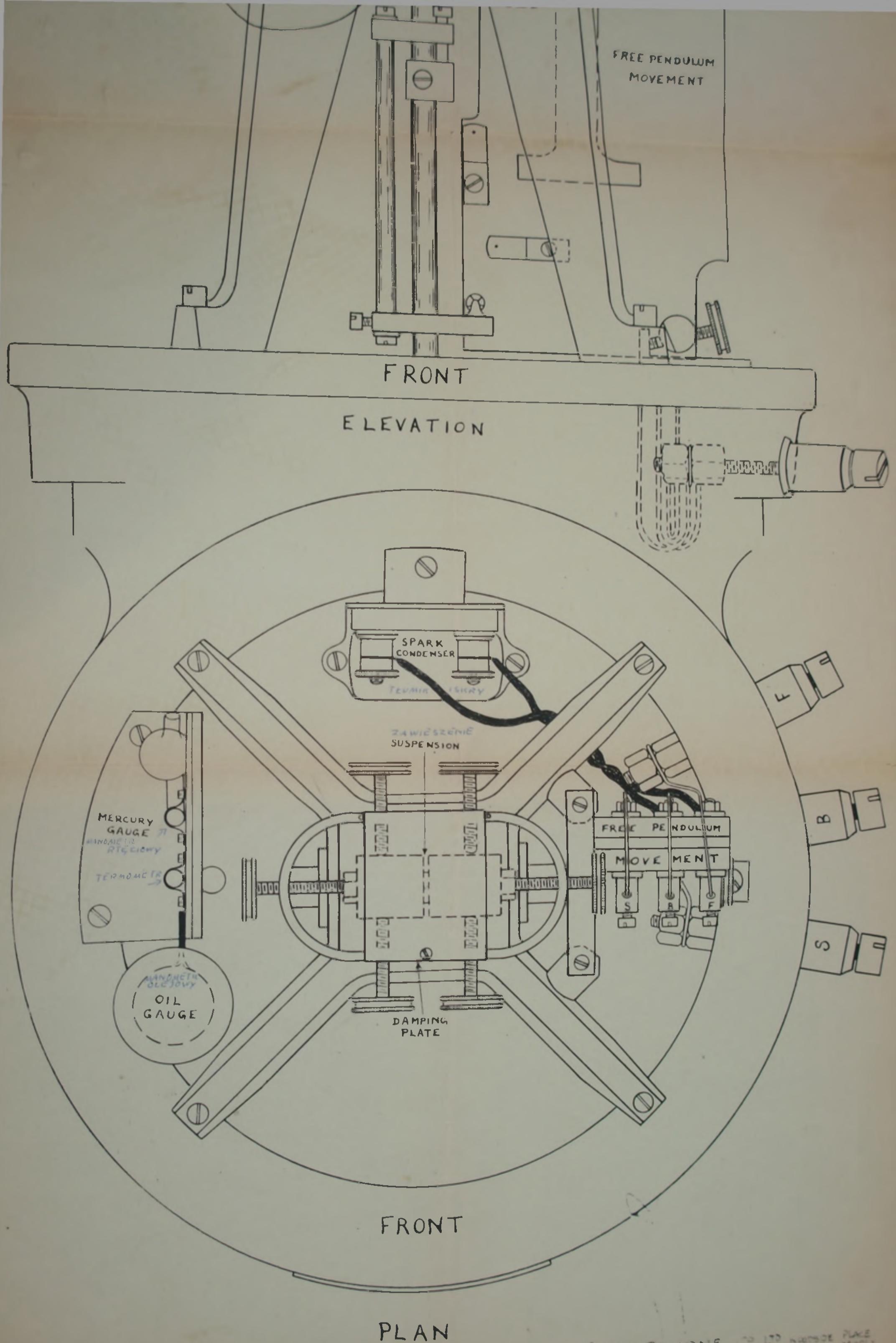


DETAILS OF THE FOUR LEGGED HEADCASTING.
SHOWING METHOD OF SUPPORTING THE MOVEMENT,
ADJUSTMENTS FOR MOVEMENT AND PENDULUM,
ALSO TERMINALS AND ELECTRICAL CONNECTIONS.

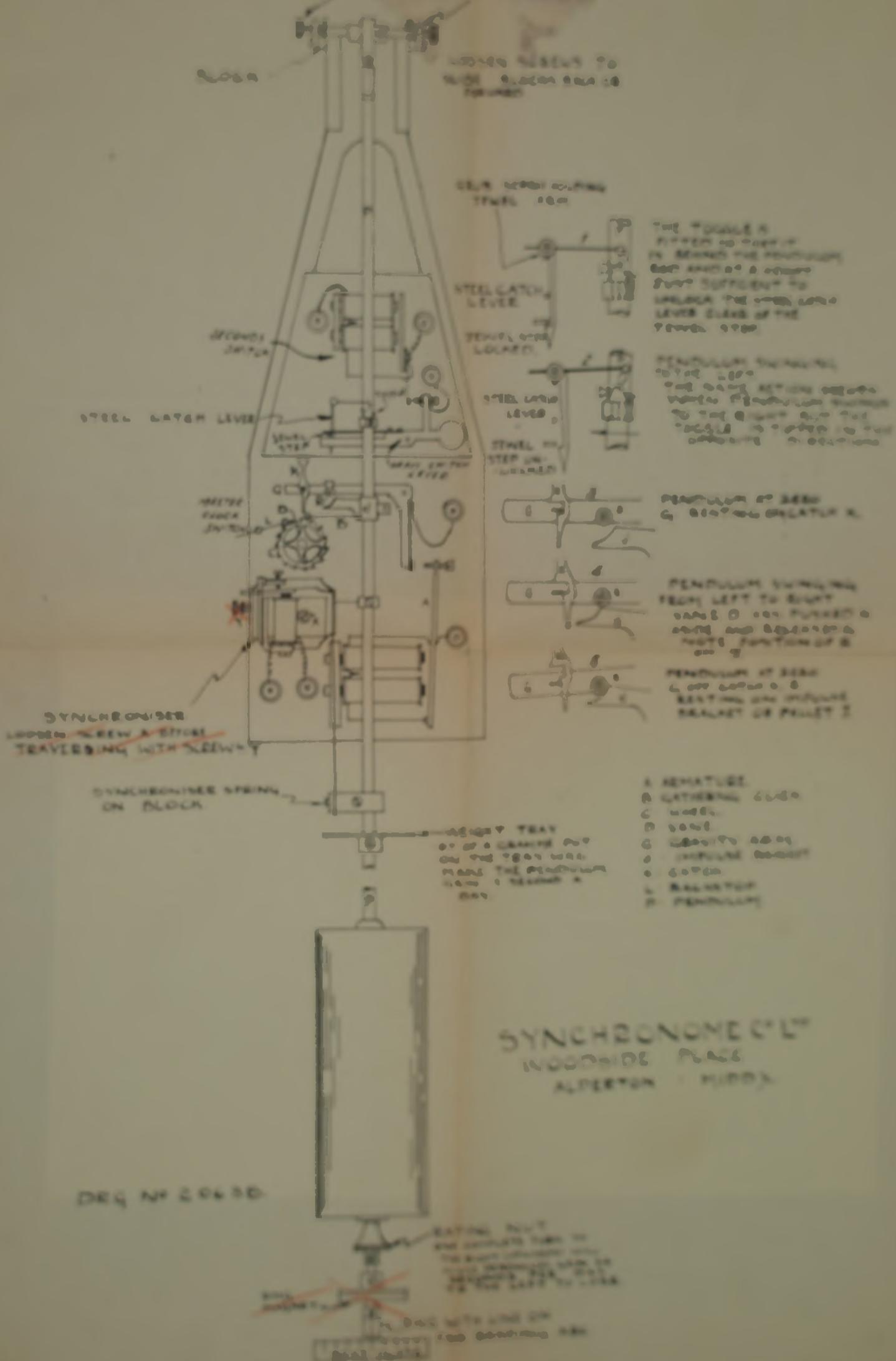
DWG. No. 14124

W. H. S.
REDRAWN *Hy* 12/757
TRACED *Hy* 20/866



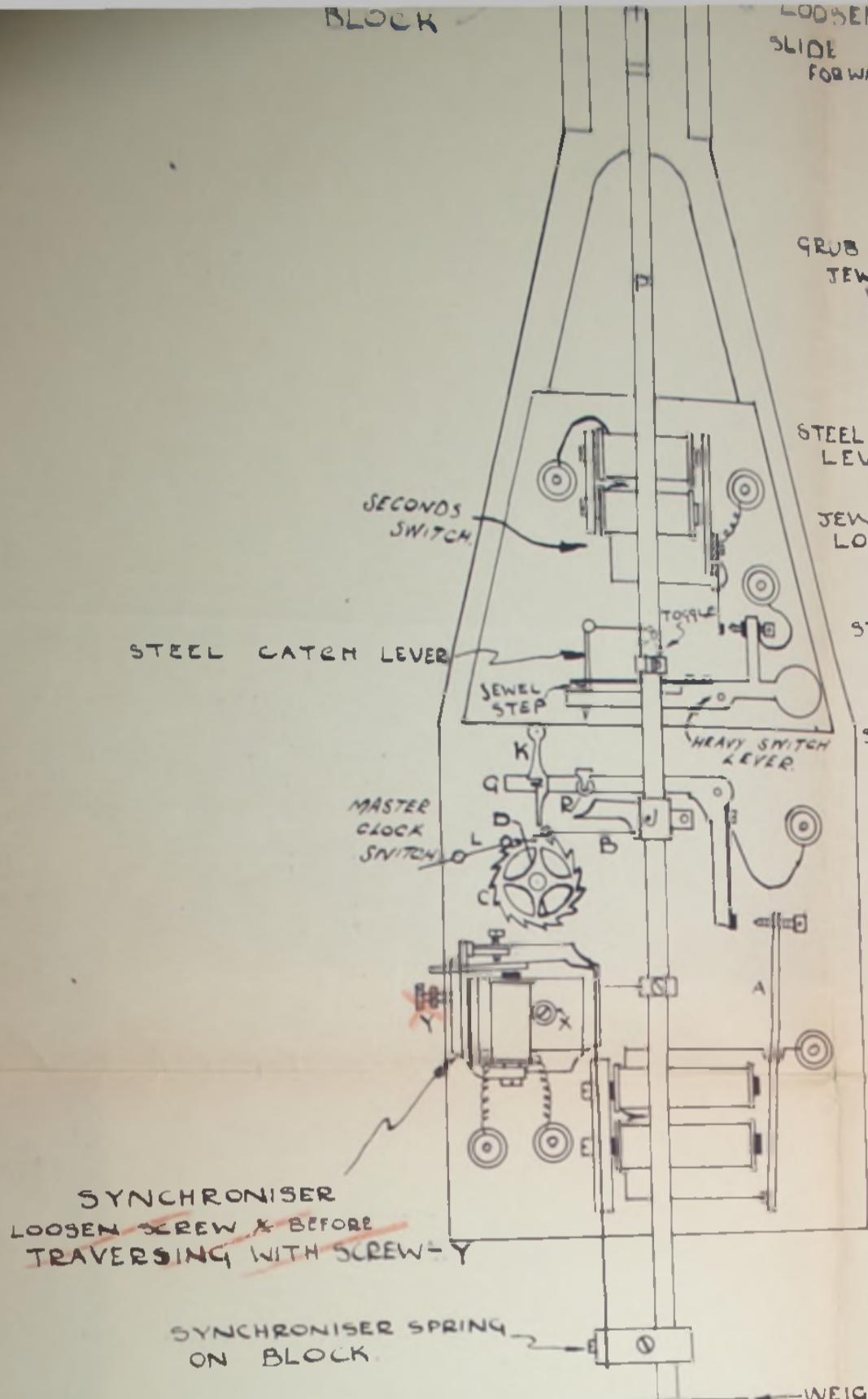


FITTING UP SLAVE PENDULUM TELEGRAMS



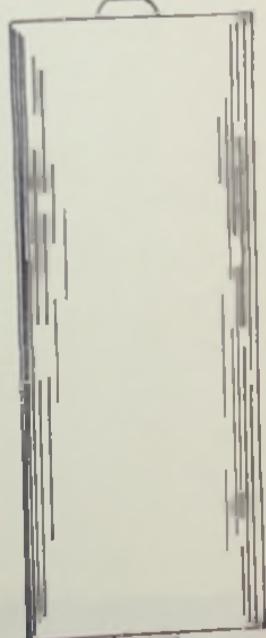
BLOCK

LOOSEN SCREWS TO
SLIDE BLOCKS BACK OR
FORWARD.



~~SYNCHRONISER
LOOSEN SCREW X BEFORE
TRaversing WITH SCREW- Y~~

SYNCHRONISER SPRING
ON BLOCK.

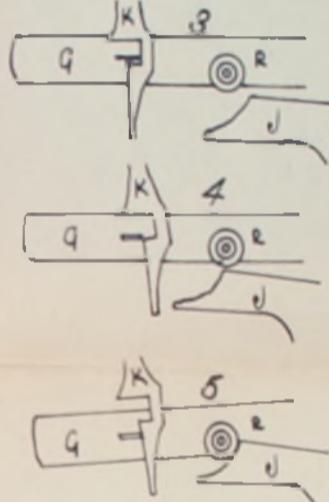


DRG NO 20638.

GRUB SCREW HOLDING
JEWEL ARM

STEEL CATCH LEVER
JEWEL STEP
LOCKED.

STEEL CATCH LEVER
JEWEL STEP UN-
LOCKED



THE TOGGLE IS
FITTED SO THAT IT
IS BEHIND THE PENDULUM
ROD AND AT A HEIGHT
JUST SUFFICIENT TO
UNLOCK THE STEEL CATCH
LEVER CLEAR OF THE
JEWEL STEP.

PENDULUM SWINGING
TO THE LEFT.
THE SAME ACTION OCCURS
WHEN PENDULUM SWINGS
TO THE RIGHT BUT THE
TOGGLE IS TIPPED IN THE
OPPOSITE DIRECTION.

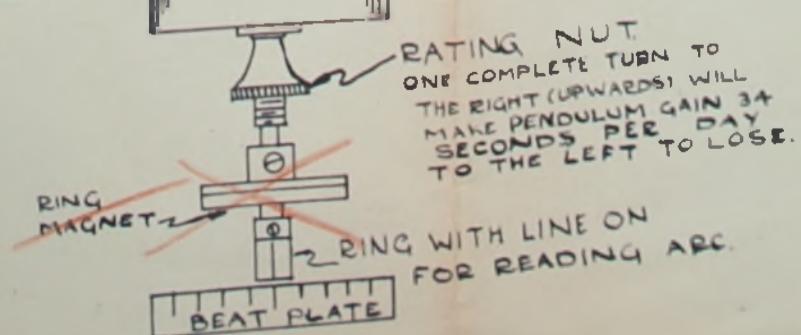
PENDULUM AT ZERO
G. RESTING ON CATCH K.

PENDULUM SWINGING
FROM LEFT TO RIGHT
VANE D HAS PUSHED K
ASIDE AND RELEASED G
NOTE POSITION OF R
ON J.

PENDULUM AT ZERO
G OFF CATCH K. R
RESTING ON IMPULSE
BRACKET OR PALLET J.

A. ARMATURE.
B. GATHERING CLICK.
C. WHEEL.
D. VANE.
E. GRAVITY ARM.
F. IMPULSE BRACKET.
G. CATCH.
H. BACKSTOP.
P. PENDULUM.

SYNCHRONOME CO LTD
WOODSIDE PLACE
ALPERTON · MIDDX.



RATING NUT
ONE COMPLETE TURN TO
THE RIGHT (UPWARDS) WILL
MAKE PENDULUM GAIN 34
SECONDS PER DAY
TO THE LEFT TO LOSE.

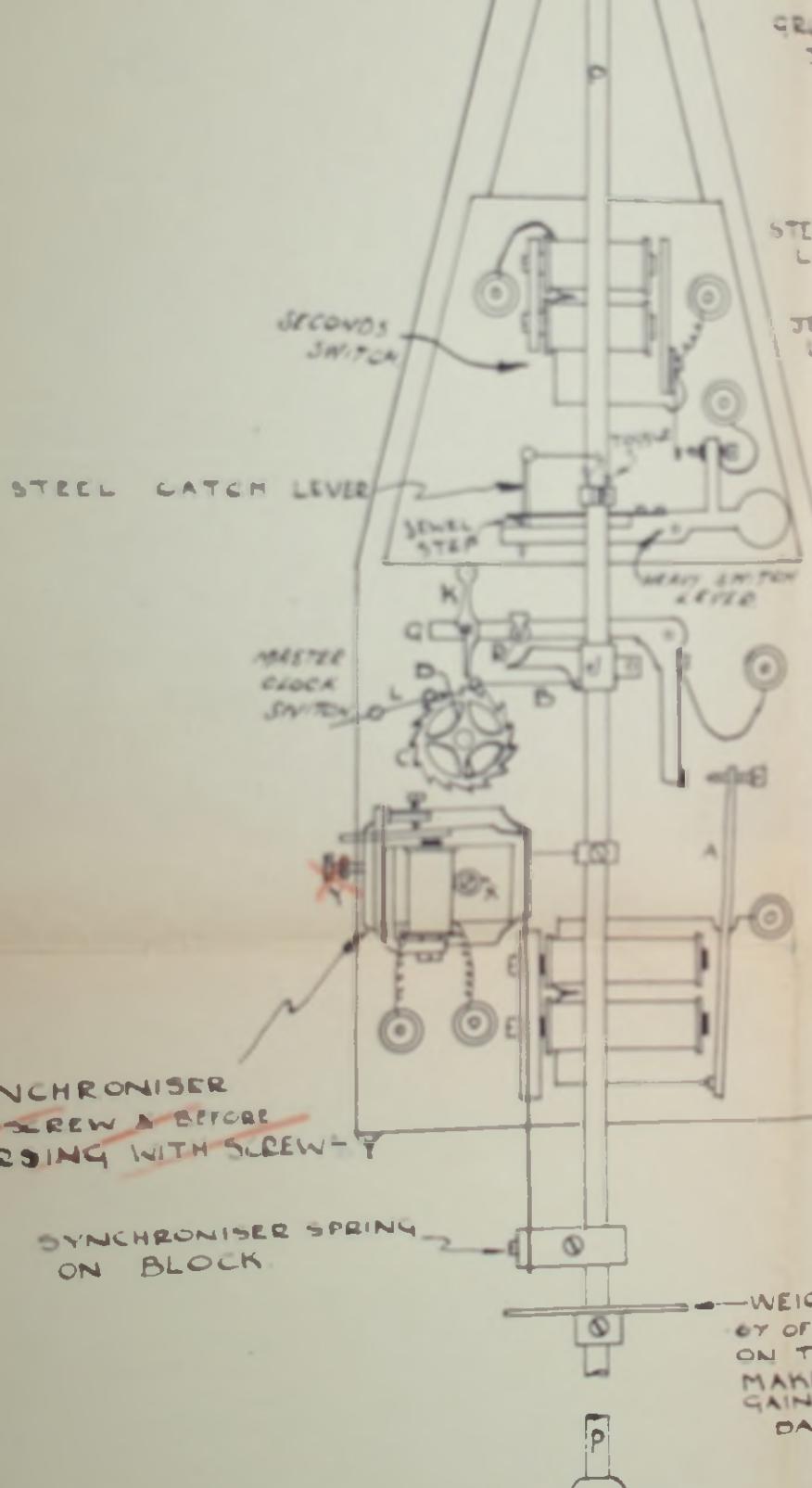
RING WITH LINE ON
FOR READING ARC.

FITTING UP SLAVE PENDULUM

TRUNNION TRAVERSE

BLOCK

LOOSEN SCREWS TO
SLIDE BLOCKS BACK OR
FORWARD.



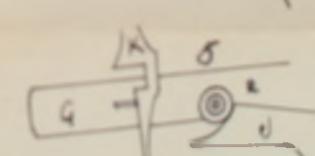
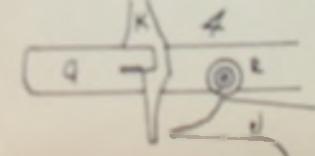
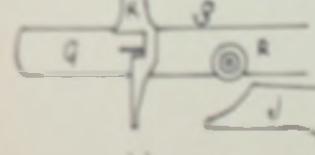
GRUB SCREW HOLDING
JEWEL ARM

STEEL CATCH
LEVER

JEWEL STEP
LOCKED.

STEEL CATCH
LEVER

JEWEL
STEP UN-
LOCKED



THE TOGGLE IS
FITTED SO THAT IT
IS BEHIND THE PENDULUM
ARM AND AT A HEIGHT
JUST SUFFICIENT TO
UNLOCK THE STEEL CATCH
LEVER CLEAR OF THE
JEWEL STEP.

PENDULUM SWINGING
TO THE LEFT.

THE SAME ACTION OCCURS
WHEN PENDULUM SWINGS
TO THE RIGHT BUT THE
TOGGLE IS TIPPED IN THE
OPPOSITE DIRECTION.

PENDULUM AT ZERO
G RESTING ON CATCH K.

PENDULUM SWINGING
FROM LEFT TO RIGHT
VANE D HAS PUSHED K
ASIDE AND RELEASED G
NOTE POSITION OF R
ON J.

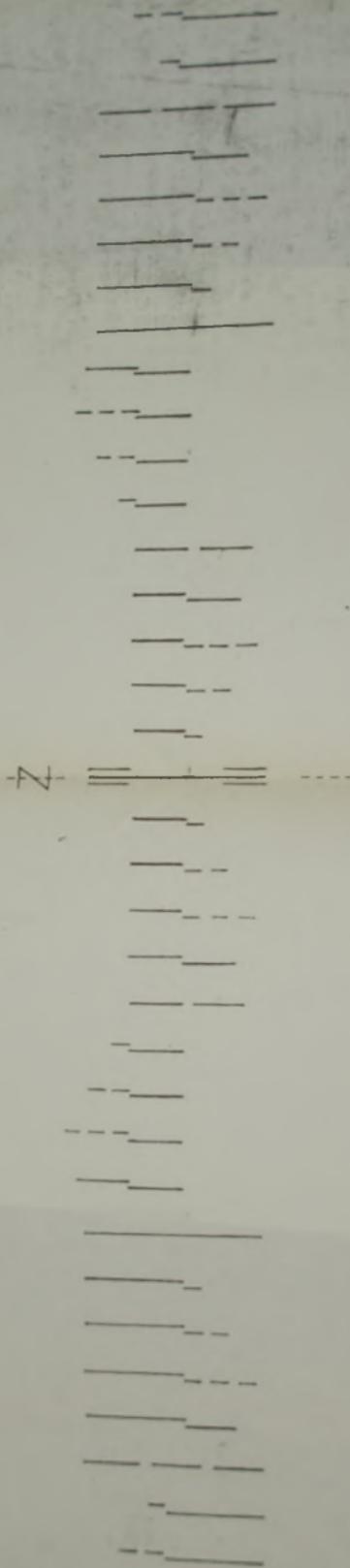
PENDULUM AT ZERO
G OFF CATCH K, R
RESTING ON IMPULSE
BRACKET OR PALLET J.

- A. ARMATURE.
- B. GATHERING CLICK.
- C. WHEEL.
- D. VANE.
- E. GRAVITY ARM.
- J. IMPULSE BRACKET.
- K. CATCH.
- L. BACKSTOP.
- P. PENDULUM.

SYNCHRONOME CO LTD
WOODSIDE PLACE
ALPERTON MIDDX.

CLOCK SHORTT N° 98

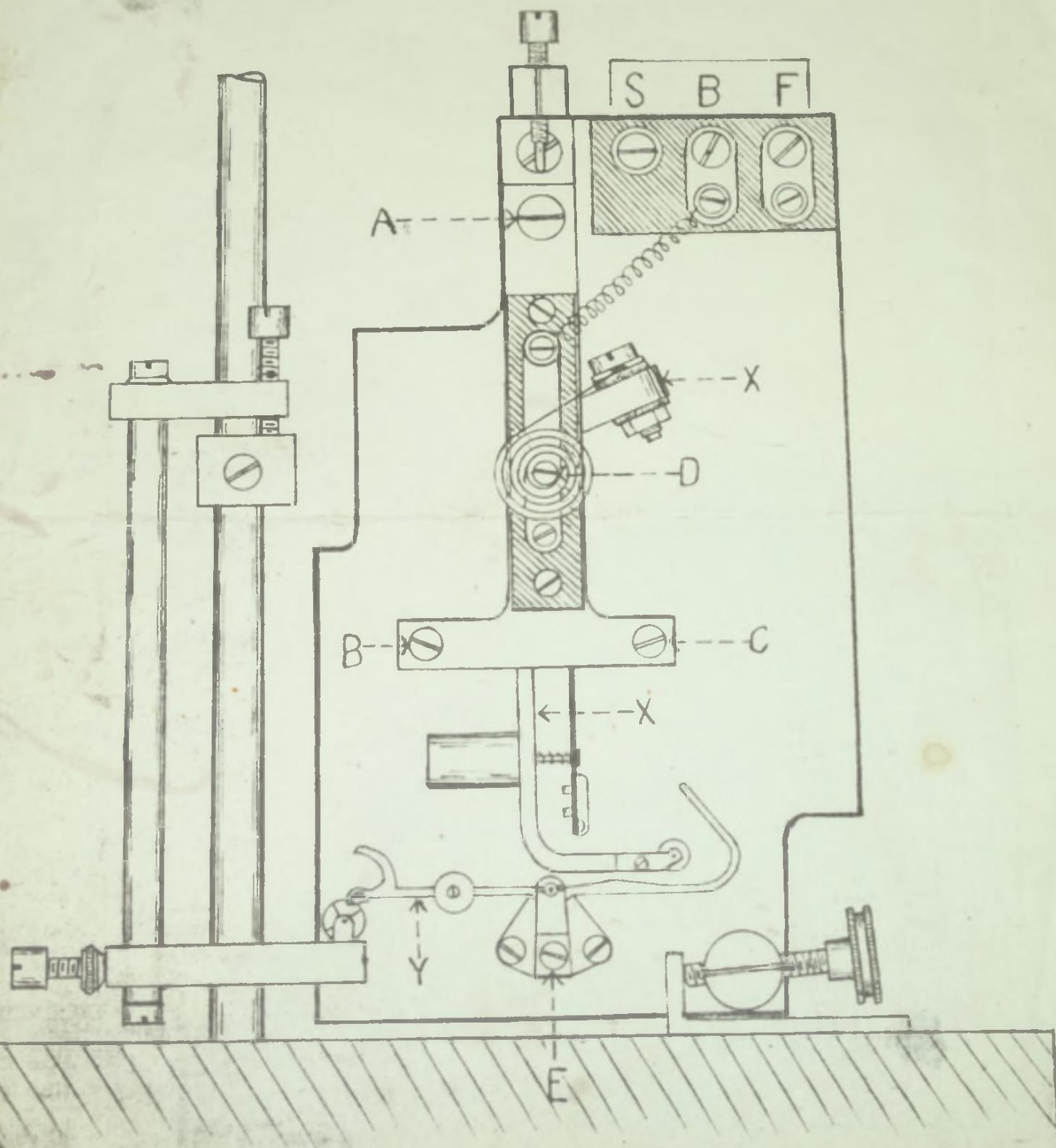
DIAGRAM OF SPECIAL BEAT PLATE SCALE.

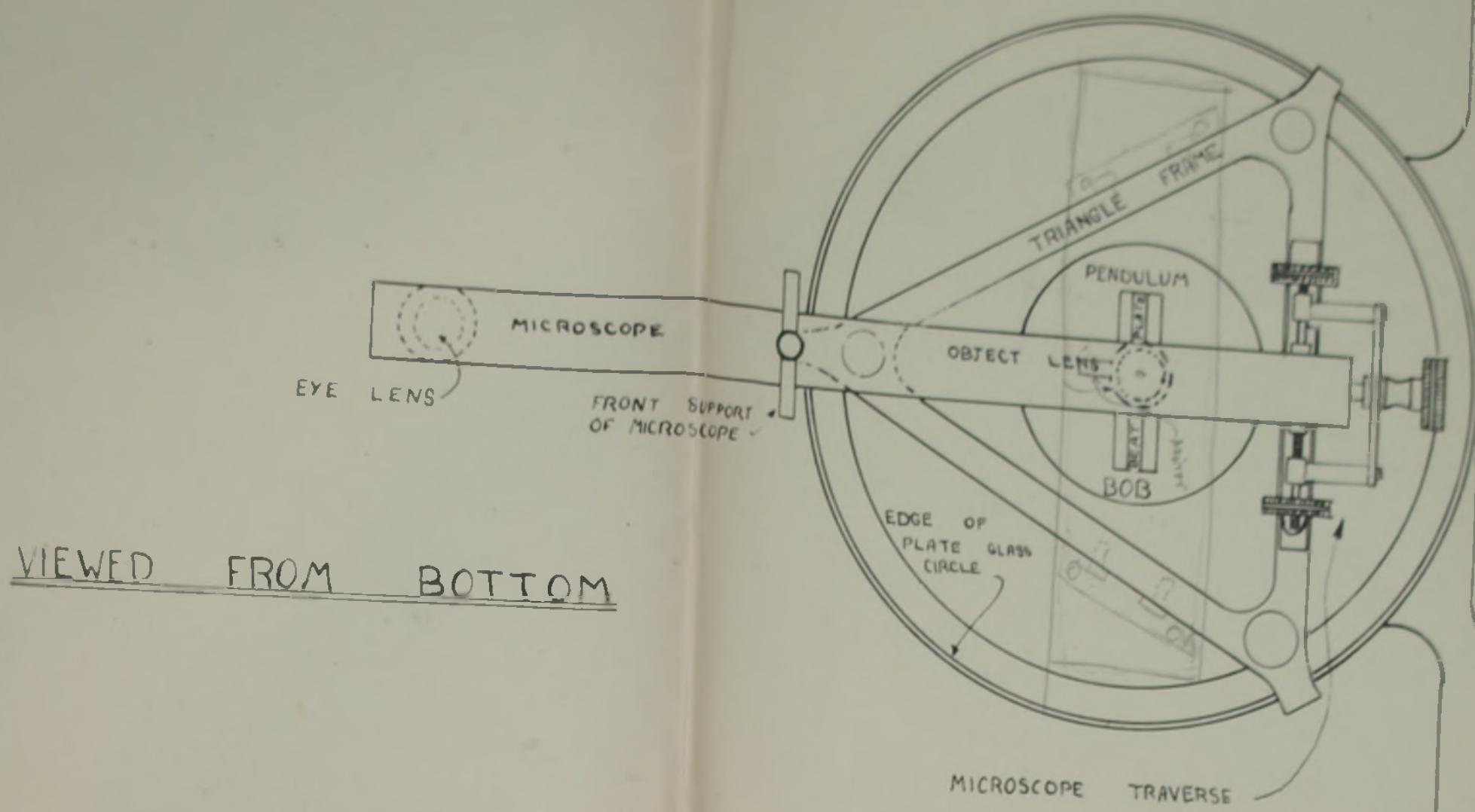


ONE DIVISION ON BEAT PLATE SCALE = 5 MINUTES OF ARC.

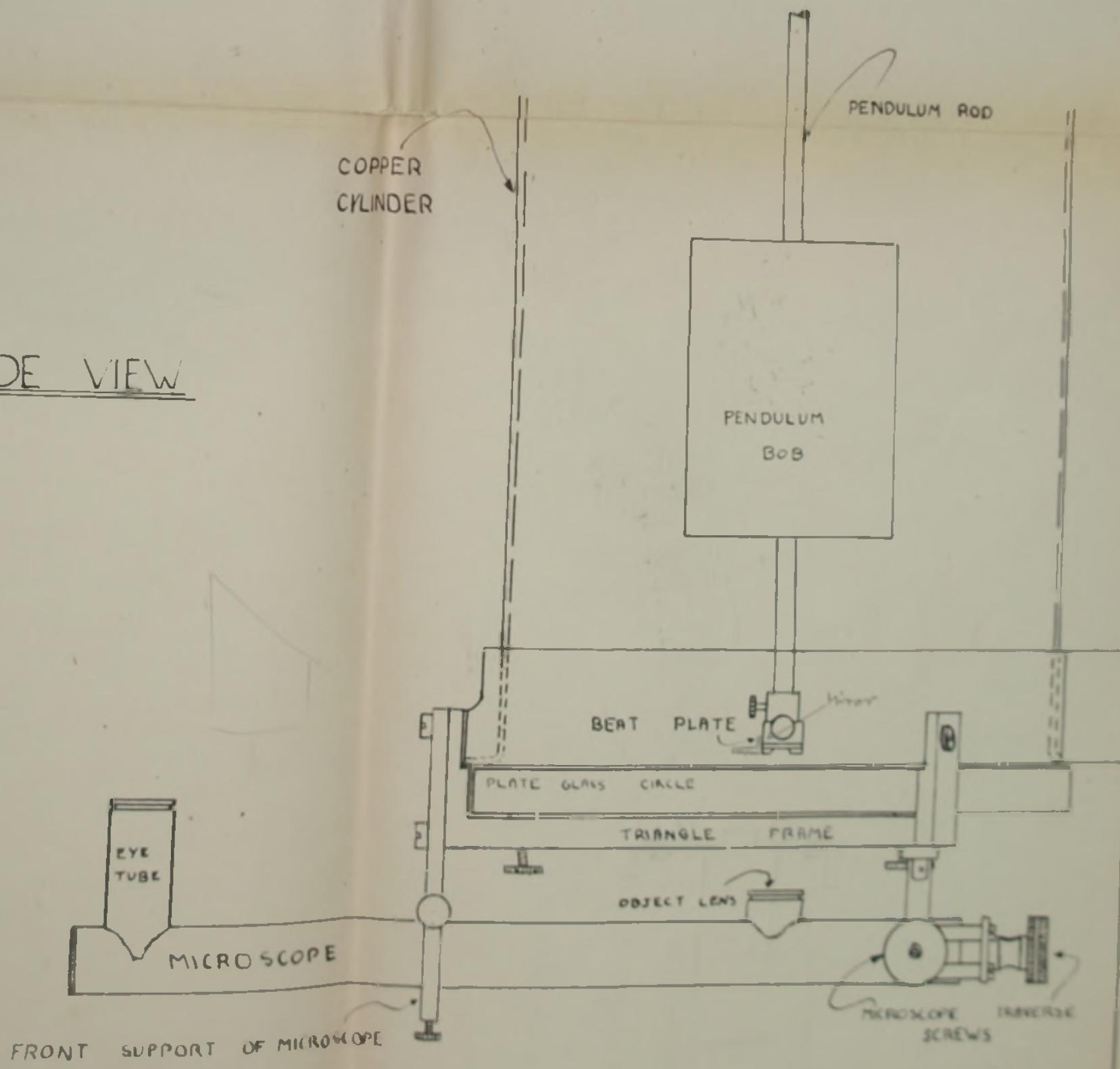
75 MICROSCOPE DIVISIONS = 5 MINUTES OF ARC.

1 MICROSCOPE DIVISION = 4 SECONDS OF ARC.





SIDE VIEW



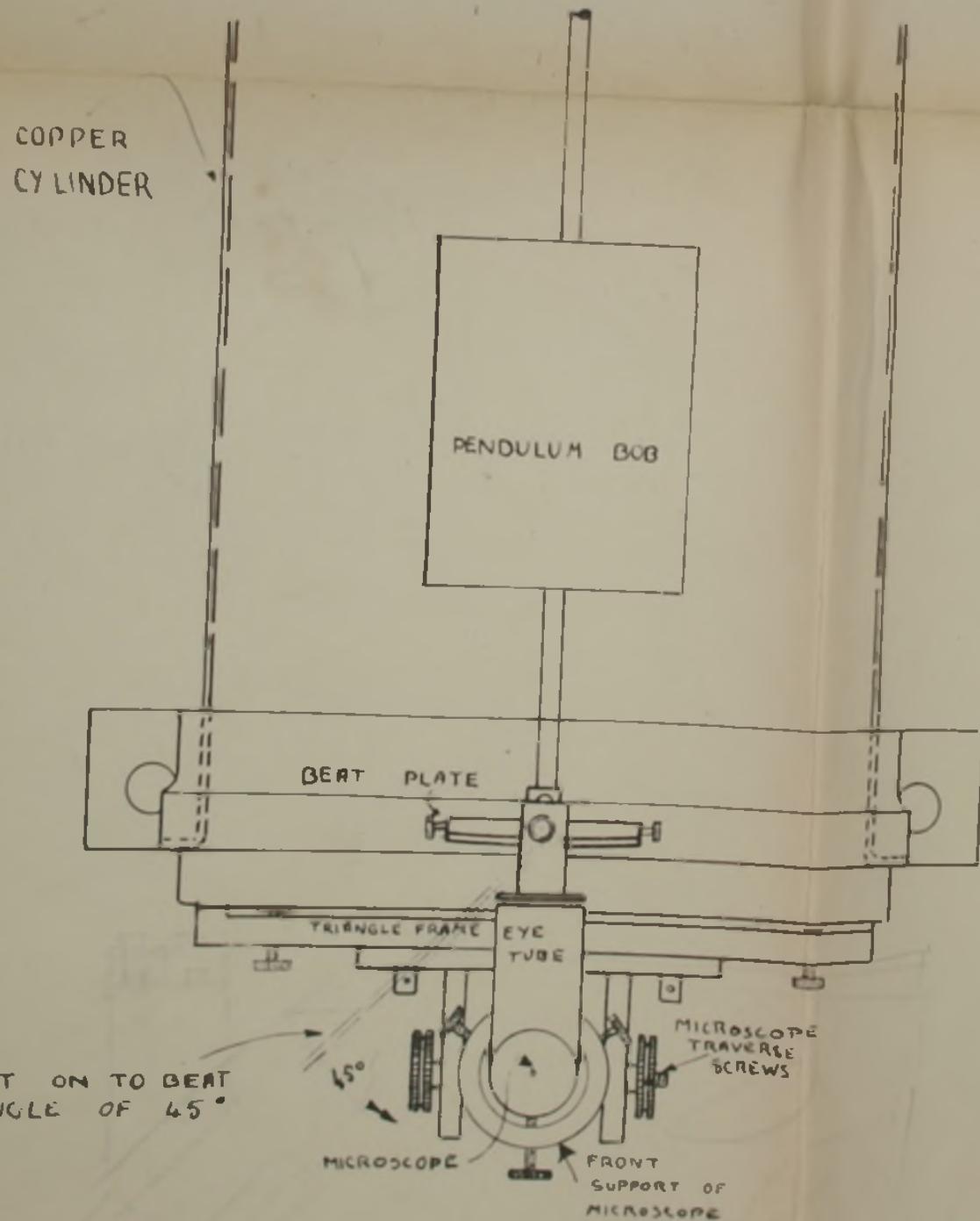
SYNCHRONOME

Bottom of Free Pendulum
microscope and its
traverse and lower end of pendulum.
SCALE $\frac{1}{2}$ FULL SIZE

CA LTD.

WOODSIDE PLACE HILPERTON

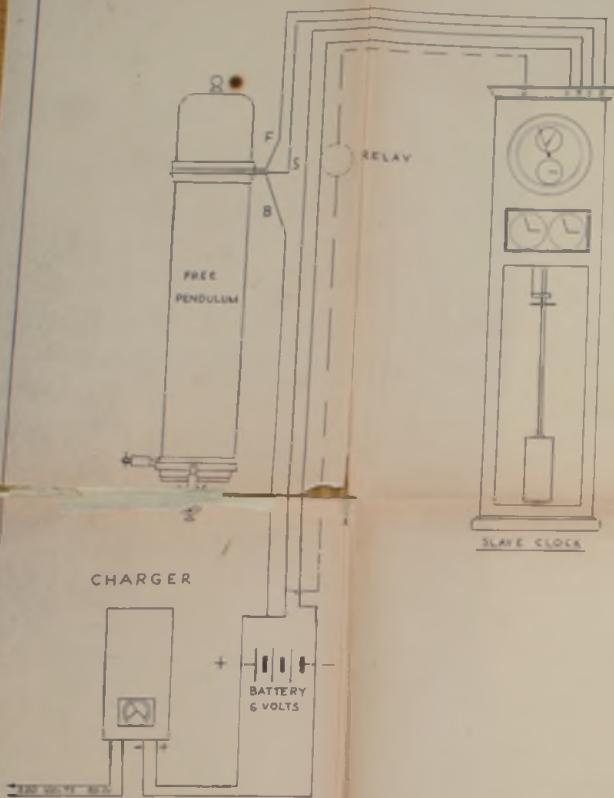
FRONT VIEW



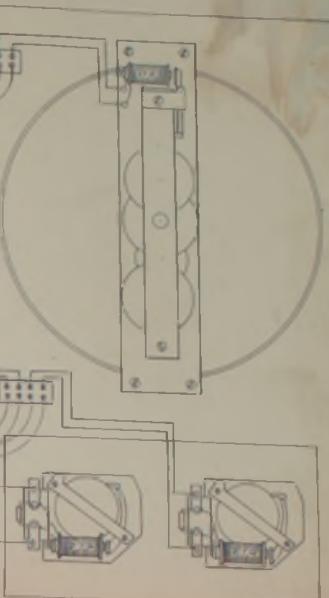
DRG 18138

SIDEREAL INSTALLATION

EXTERNAL WIRING OF CIRCUIT



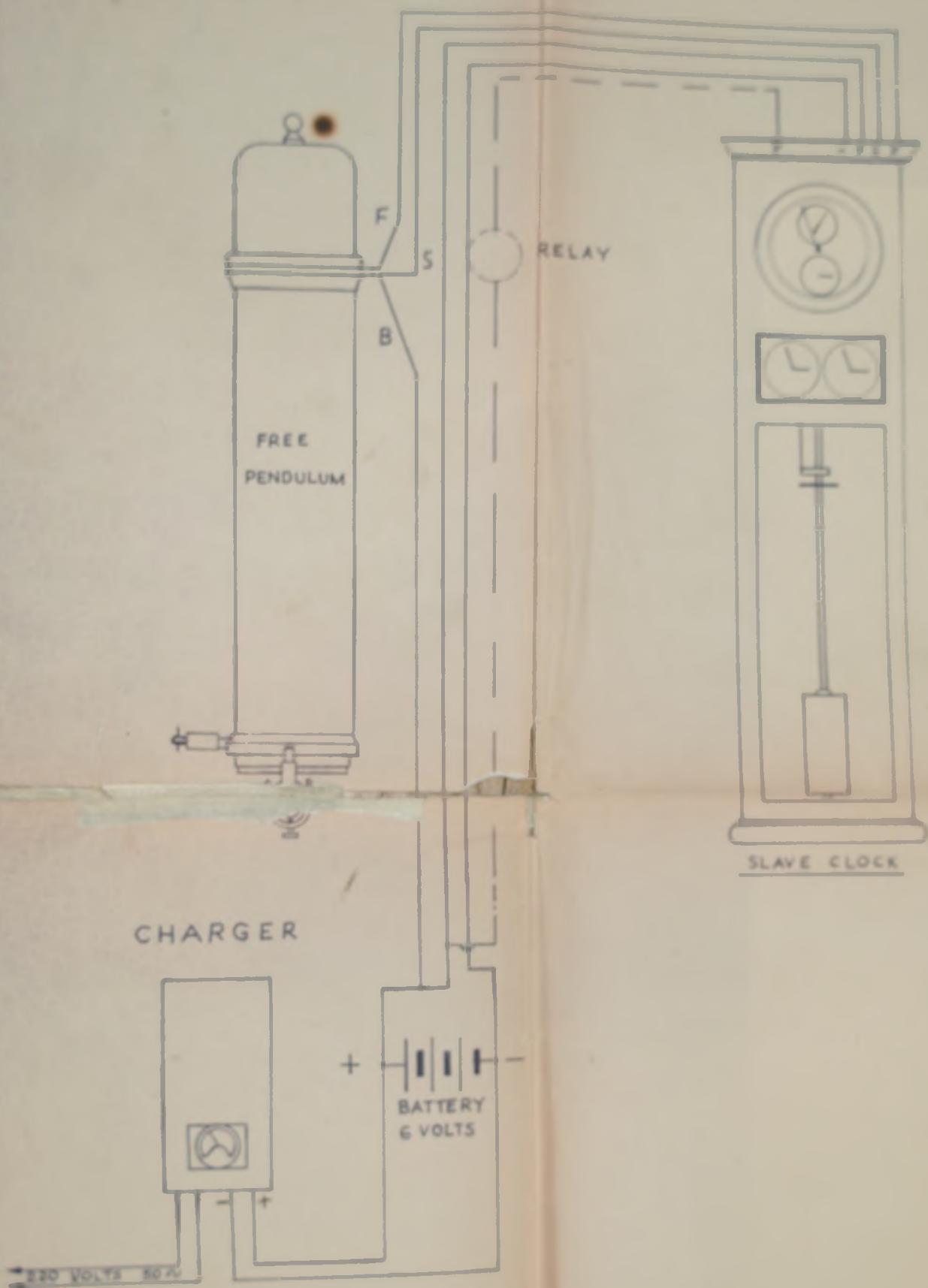
SYNCHRONOME CO LTD
WOODSIDE PLACE ALPERTON-MIDDX



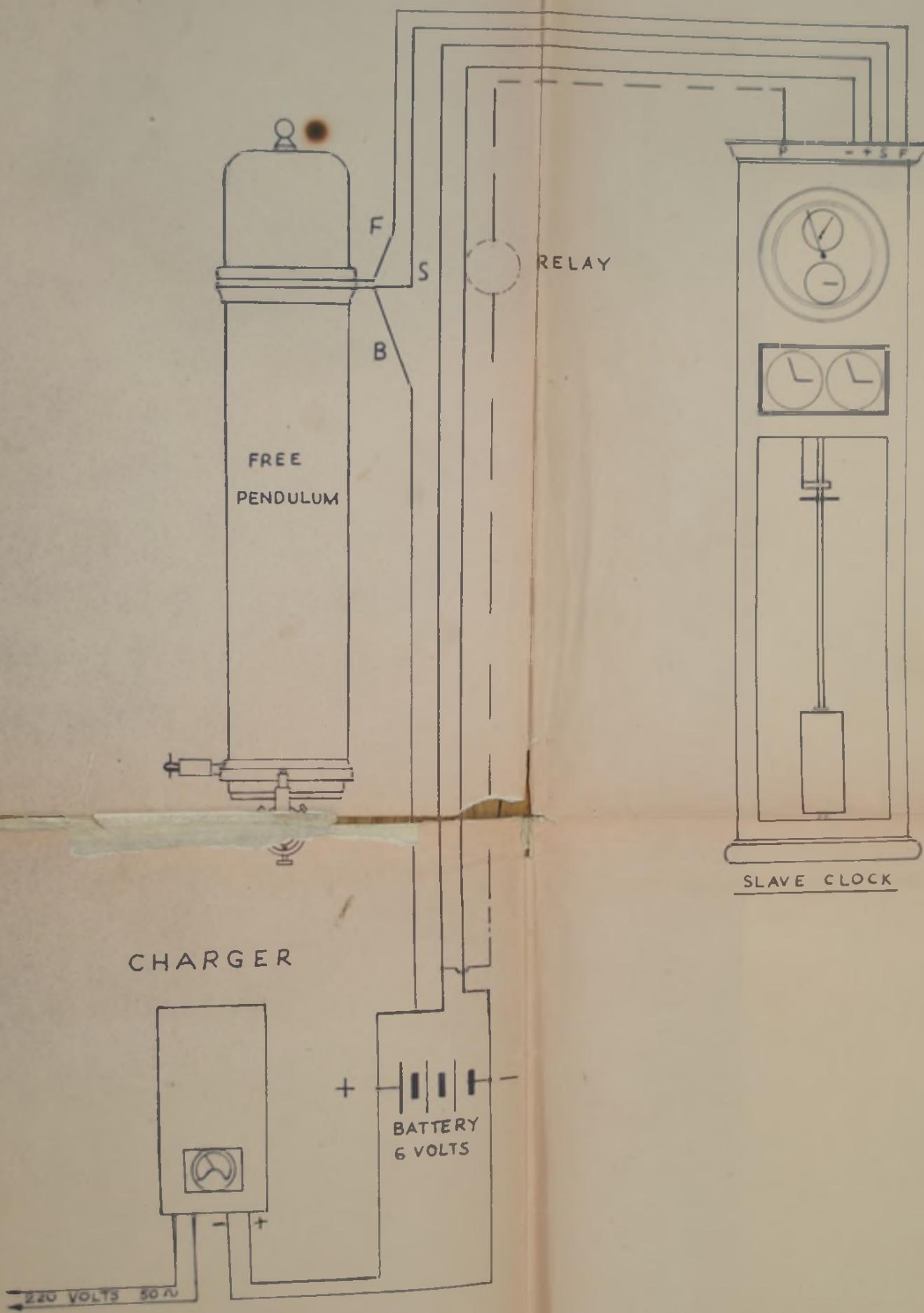
22a Slave
door & engine
BACK OF DOOR

INTERNAL WIRING OF
SLAVE CLOCK ALSO
SHOWING TERMINALS-
P-- + S F TO WHICH
EXTERNAL WIRING IS
CONNECTED

EXTERNAL WIRING OF CIRCUIT



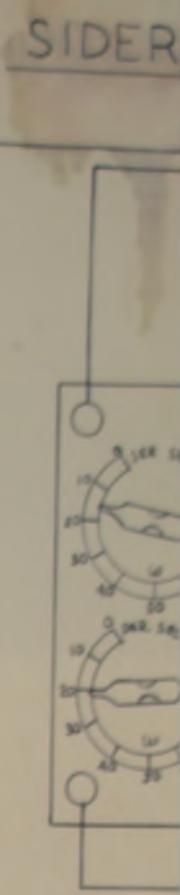
EXTERNAL WIRING OF CIRCUIT



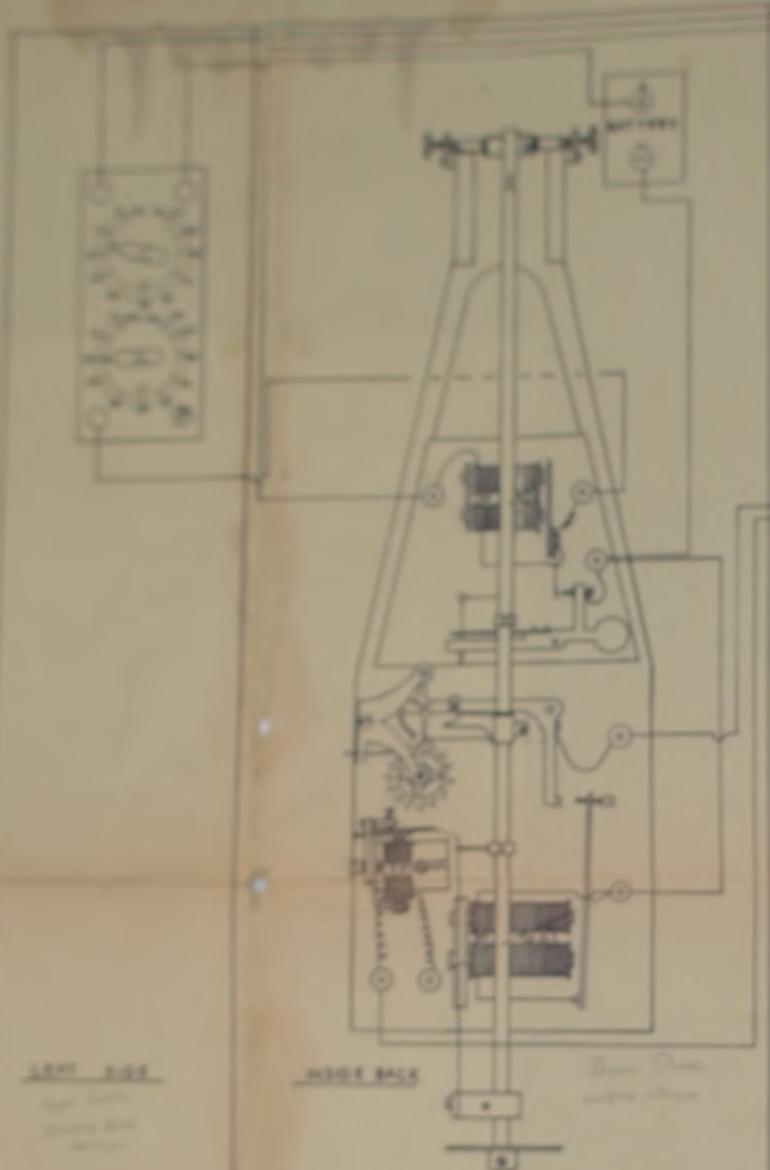
SYNCHRONOME CO LTD

WOODSIDE PLACE - ALPERTON - MIDDX.

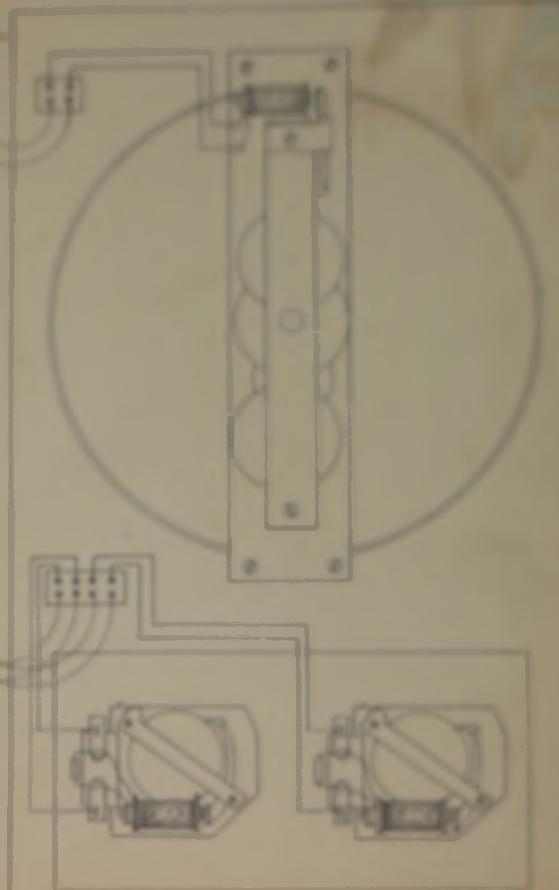
LEFT SIDE
Synchronome
Clock
Company



SIMPLEX INSTALLATION



RIGHT SIDE
power switch

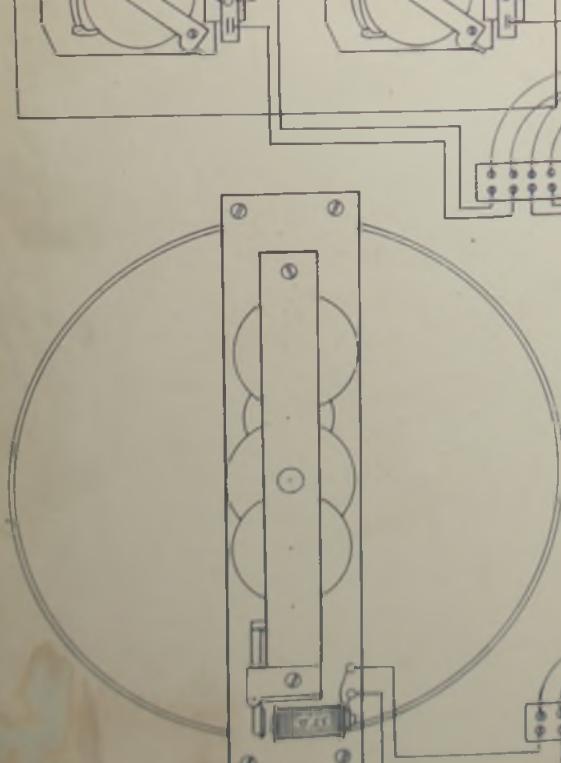
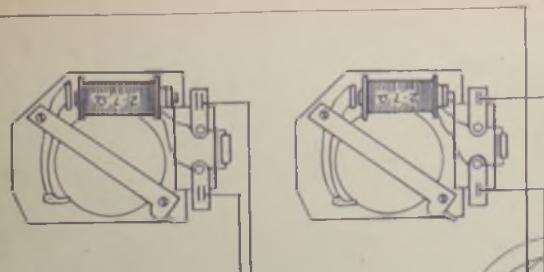


RIGHT SIDE
power switch

INTERNAL WIRING OF
SLAVE CLOCK ALSO
SHOWING TERMINALS-
P - S-F TO WHICH
EXTERNAL WIRING IS
CONNECTED

INTERNAL WIRING OF
SLAVE CLOCK ALSO
SHOWING TERMINALS
P- - + S-F TO WHICH
EXTERNAL WIRING IS
CONNECTED

BACK OF DOOR



RIGHT SIDE

Door Side

