

MODIFICATIONS TO BEAMS d_{25} AND m_4 WHEN TARGET 1
IS DISPLACED RADially

Two negative secondary beams start from target 1, m_4 at less than 4 GeV/c and d_{25} at 6 to 12 GeV/c. The operation of sharing these with slow ejection requires a radial displacement of +1 cm of target 1.

d_{25} BEAM

With the target in its present position on the equilibrium orbit, the beam d_{25} is extracted at an angle of 40 mr, the acceptance is ± 8 mr at 12 GeV/c, ± 9 mr at 6 GeV/c. These values are true for the optimum positions of the magnet MNP 010, which can, by remote control, travel parallel to the CPS magnet 1. The positions of the centre of the magnet MNP 010 measured from the centre of the CPS magnet 1 are about 115, 95 and 70 cm at 12, 9 and 6 GeV/c, respectively.

With the target displaced this acceptance and extraction angle may still be achieved by either rotating through 4 mr or displacing by +1 cm the magnet MNP 004 (first magnet of m_4 beam located in tank 1); the settings of magnet MNP 010 being roughly the same.

It would appear that a rotation of the magnet MNP 004 would involve extensive modifications.

m_4 BEAM

The acceptance and extraction angle of this beam are unaffected as target 1 and the magnet MNP 004 are both displaced by +1 cm. However, the initial two lenses of this beam should be adjusted to take account of the change in position of MNP 004. These changes are 4.6 mm and 2.5 mm

for quadrupoles QNP 01 and QNP 02 respectively, perpendicular to the beam line southwards.

Following diagrams show a sketch of the first part of beams d_{25} and m_4 (Fig. 1) together with phase plane emittances and boundaries of d_{25} beam in various longitudinal positions along the equilibrium orbit (Figs. 2, 3, 4, 5 and 6).

S. Lang
Ch. Steinbach

Distribution (open) :

A. Ašner
P. Coet
D. Dekkers
J. Fronteau
J. Geibel
R. Gouiran
H. Hereward
L. Henny
L. Hoffmann
J. Léault
I. Mannelli
A. Michelini
G.L. Munday
G. Petrucci
M. Perret
M. Reinharz
J.-C. Sens
V. Soergel
P.H. Standley
A. Zichichi

CAVITE 3

10 m.

Faisceau : M7
 Electrodes : Acier inox
 Longueur : 9m

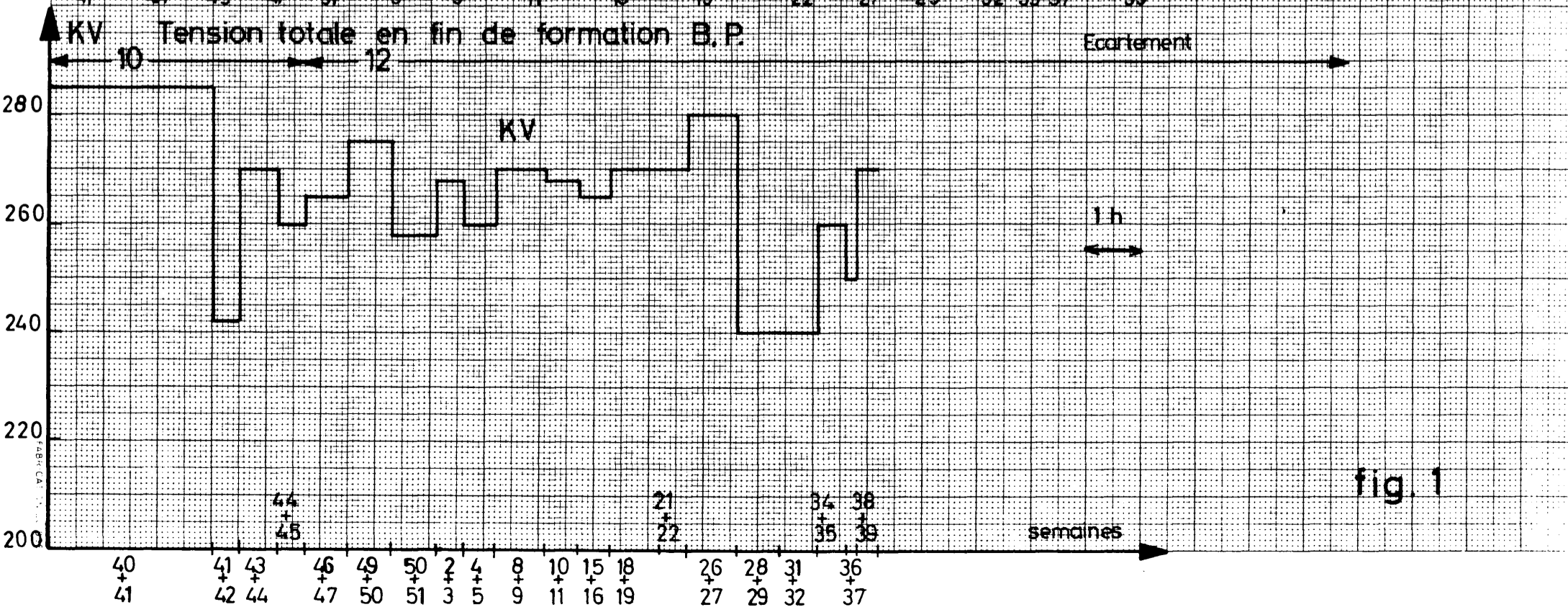
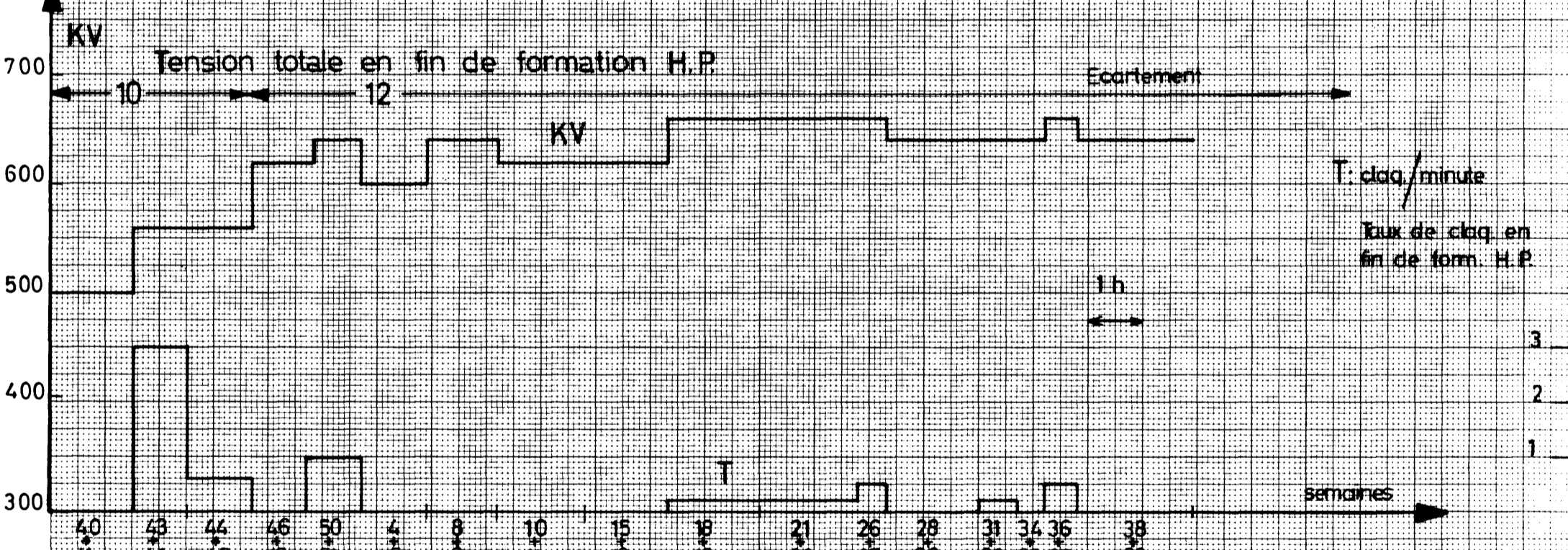
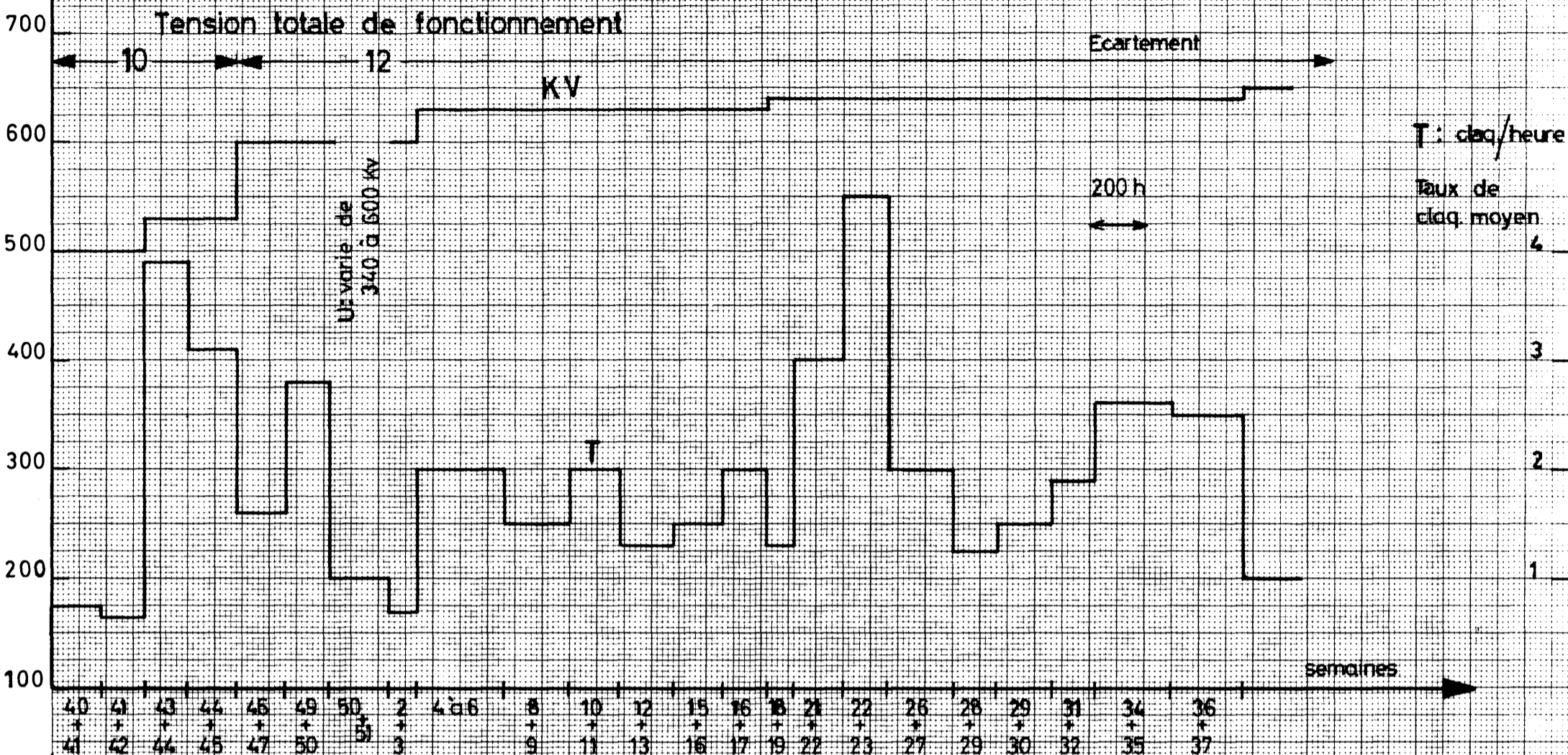


fig. 1

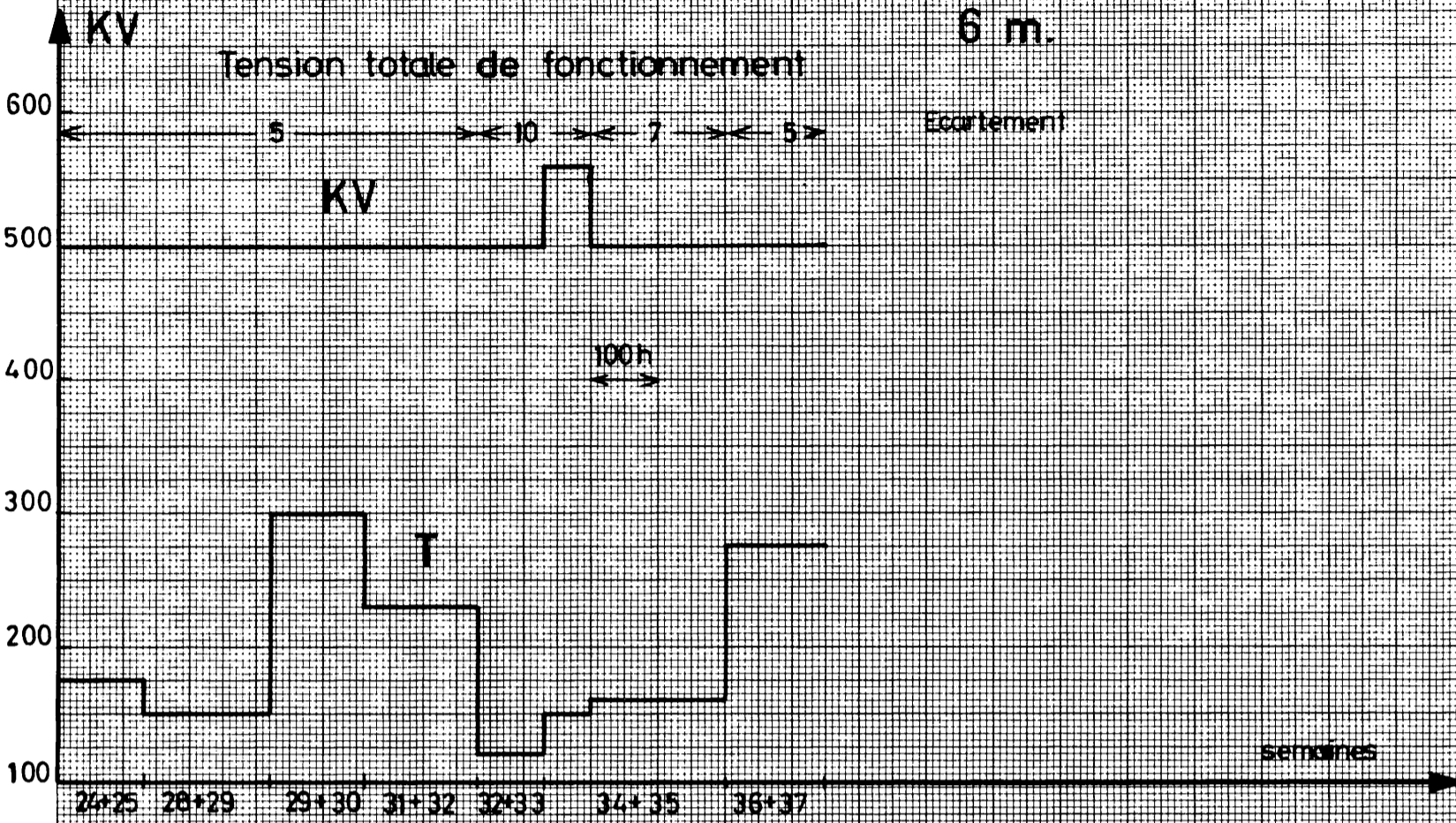
CAVITE "AB"

Faisceau : M 6

Electrodes :
cathodes : alu oxyde
anodes : ac. inox

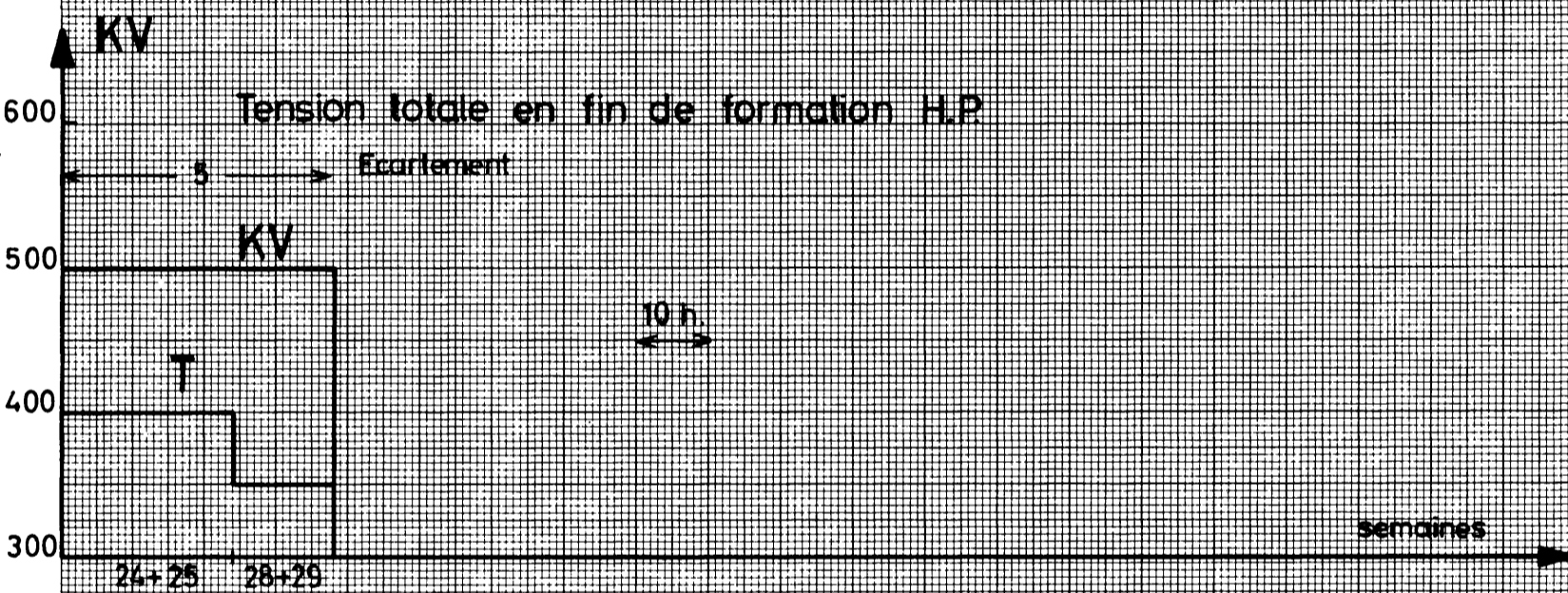
Longueur : 6 m.

6 m.



T : claq/h. 3

Taux de claq. moyen 2



T : claq/h. 2

Taux en fin de formation 1

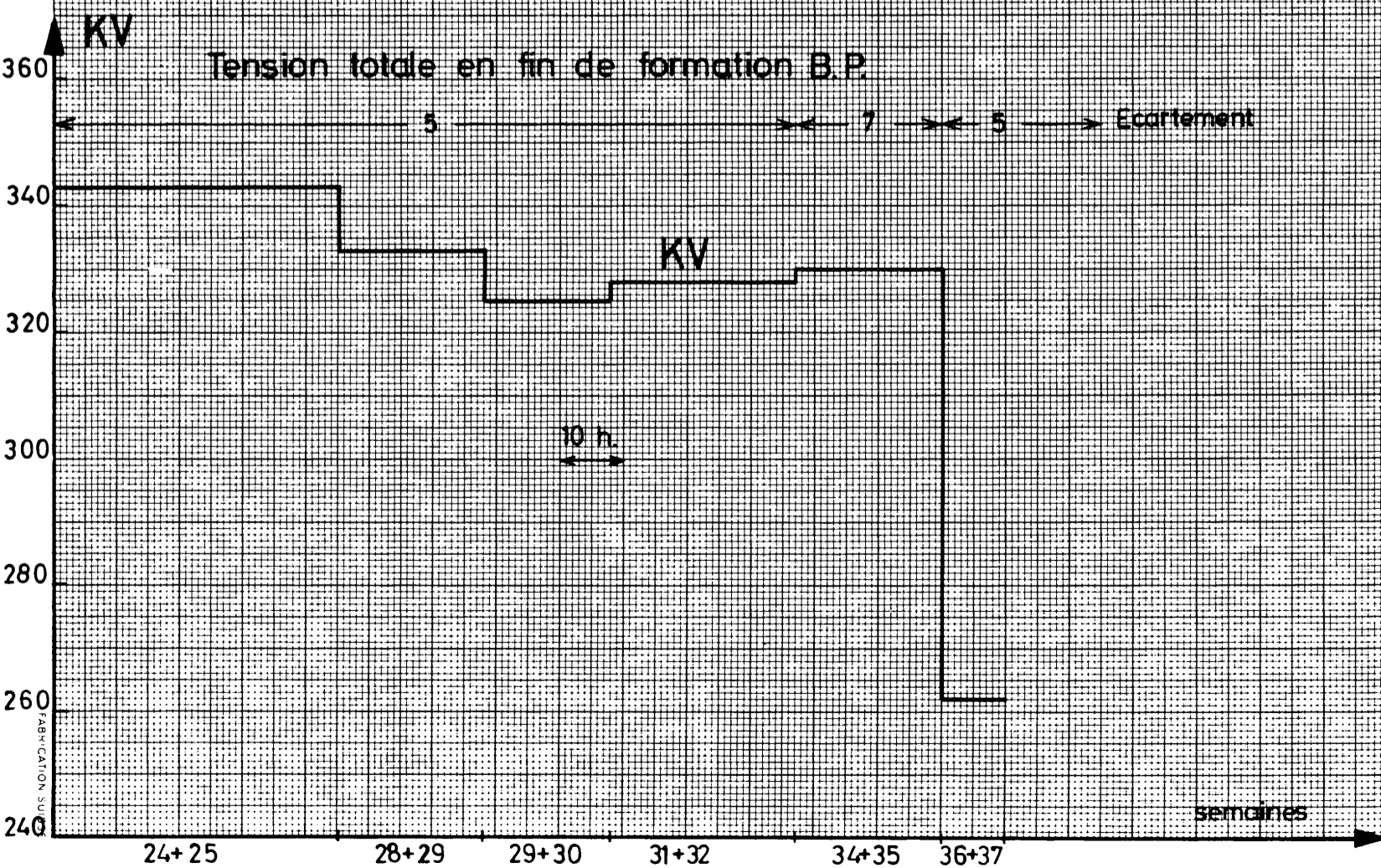


fig. 2

CAVITE "CD"

6 m.

Faisceau M 6

Electrodes :
cathodes, du oxyd
anodes, ac. inox

Longueur : 6 m.

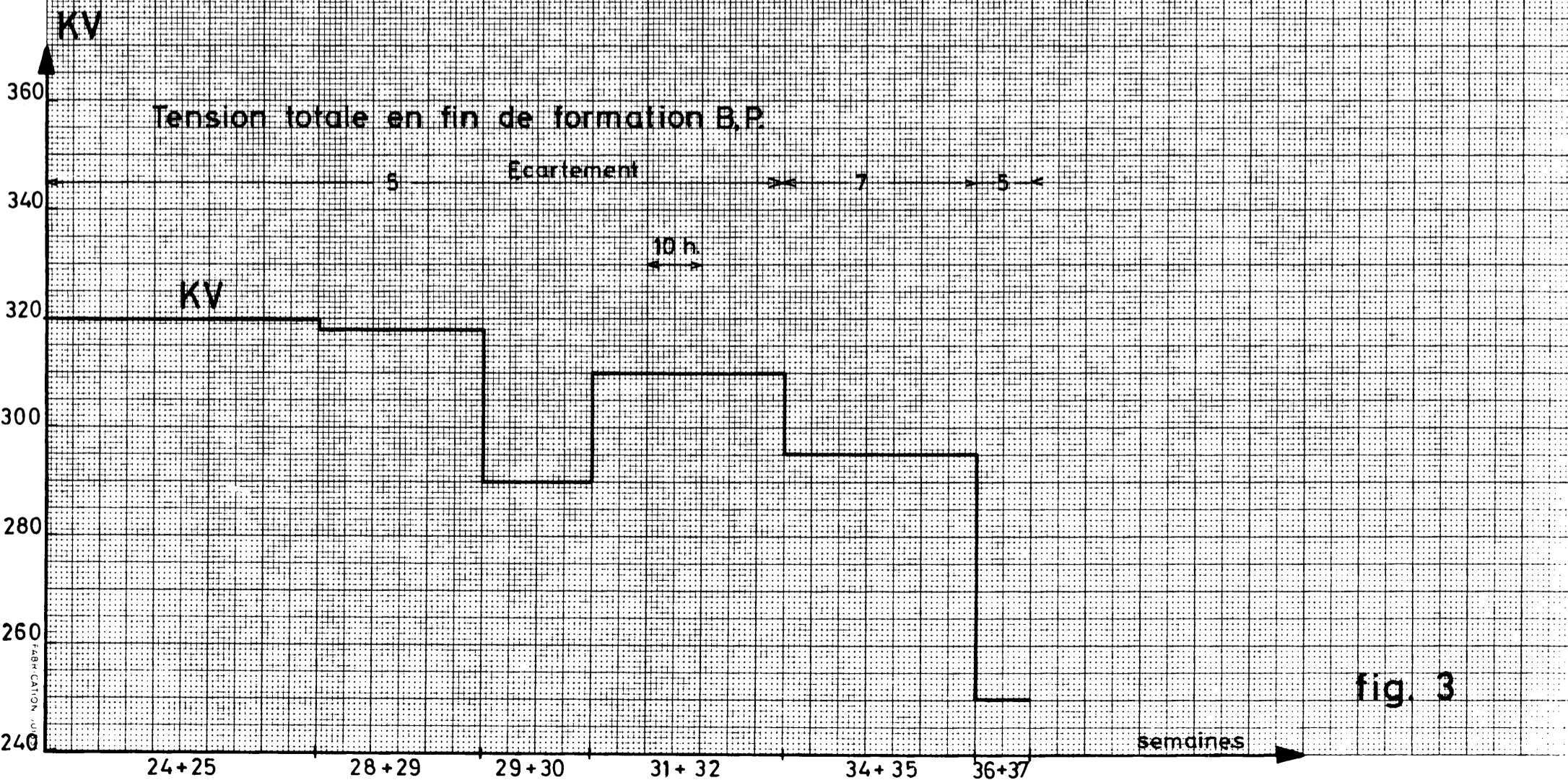
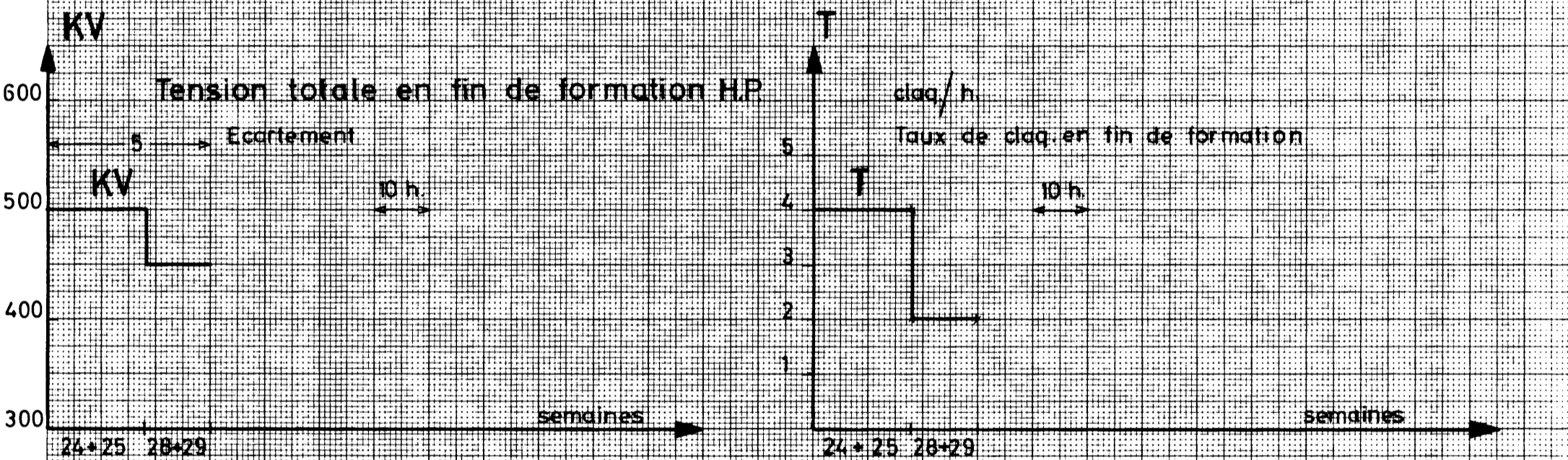
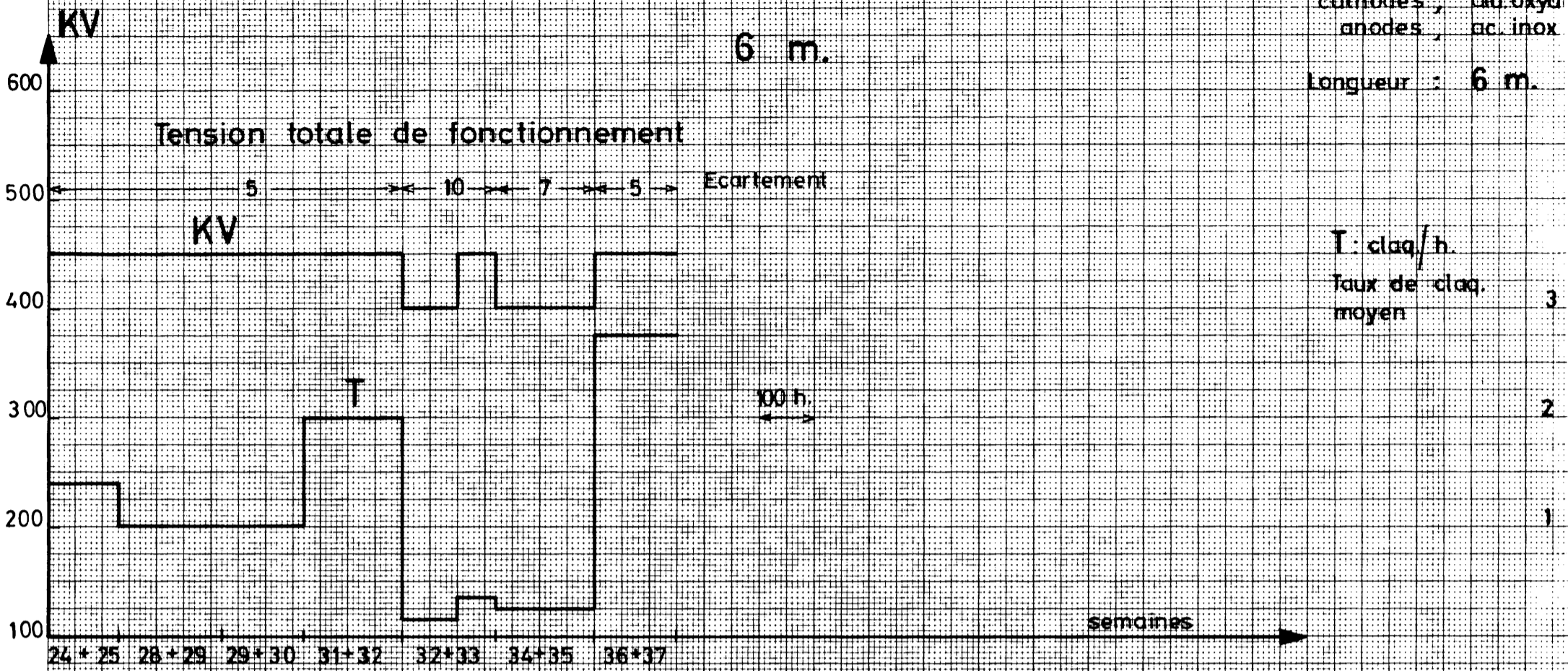


fig. 3

CAVITE "BEAUJOLAIS"

2 m.

Faisceau : K10

Electrodes :
 anode : ac. inox
 cathode : alu. oxyde

Longueur : 2 m.

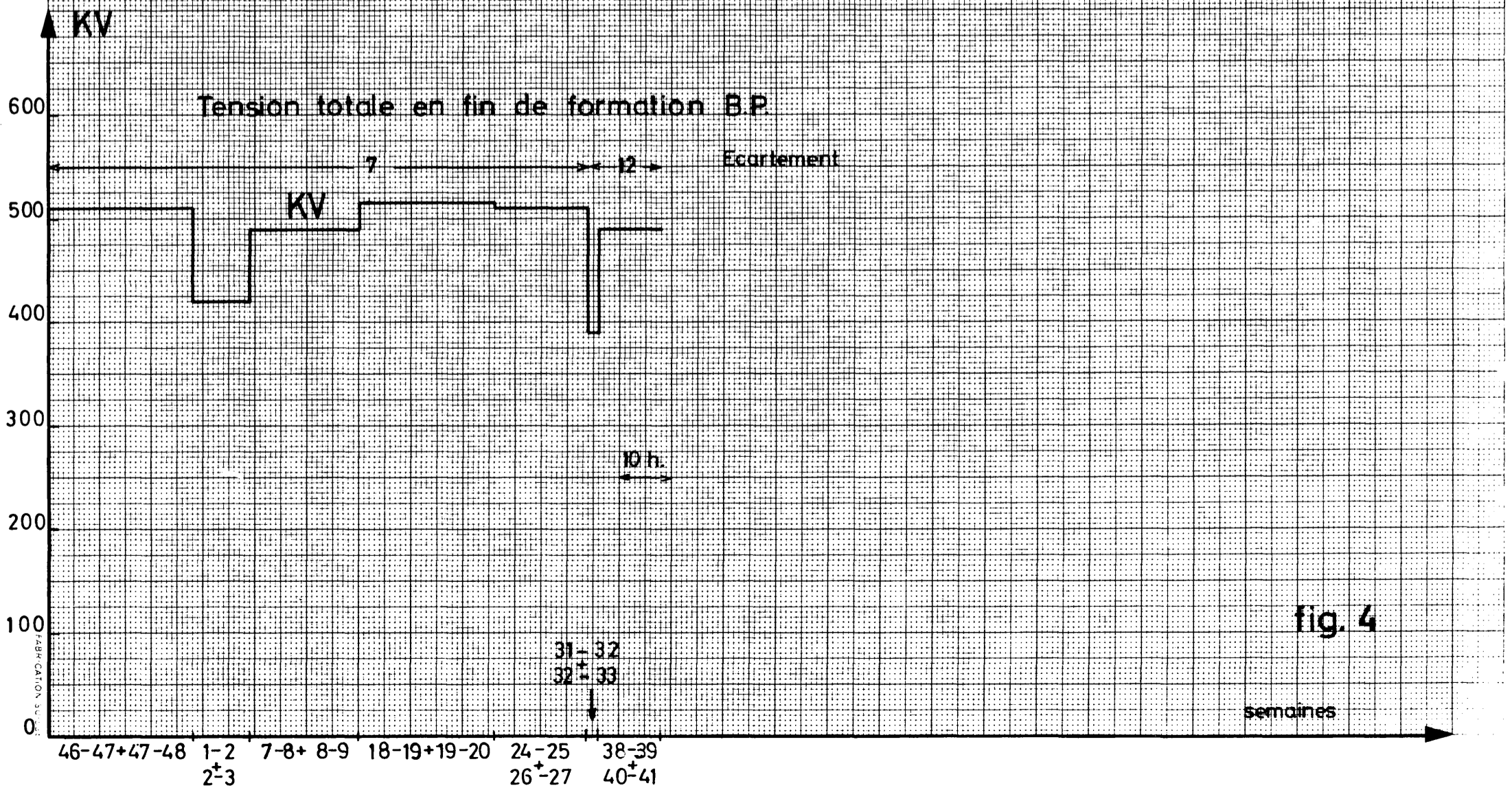
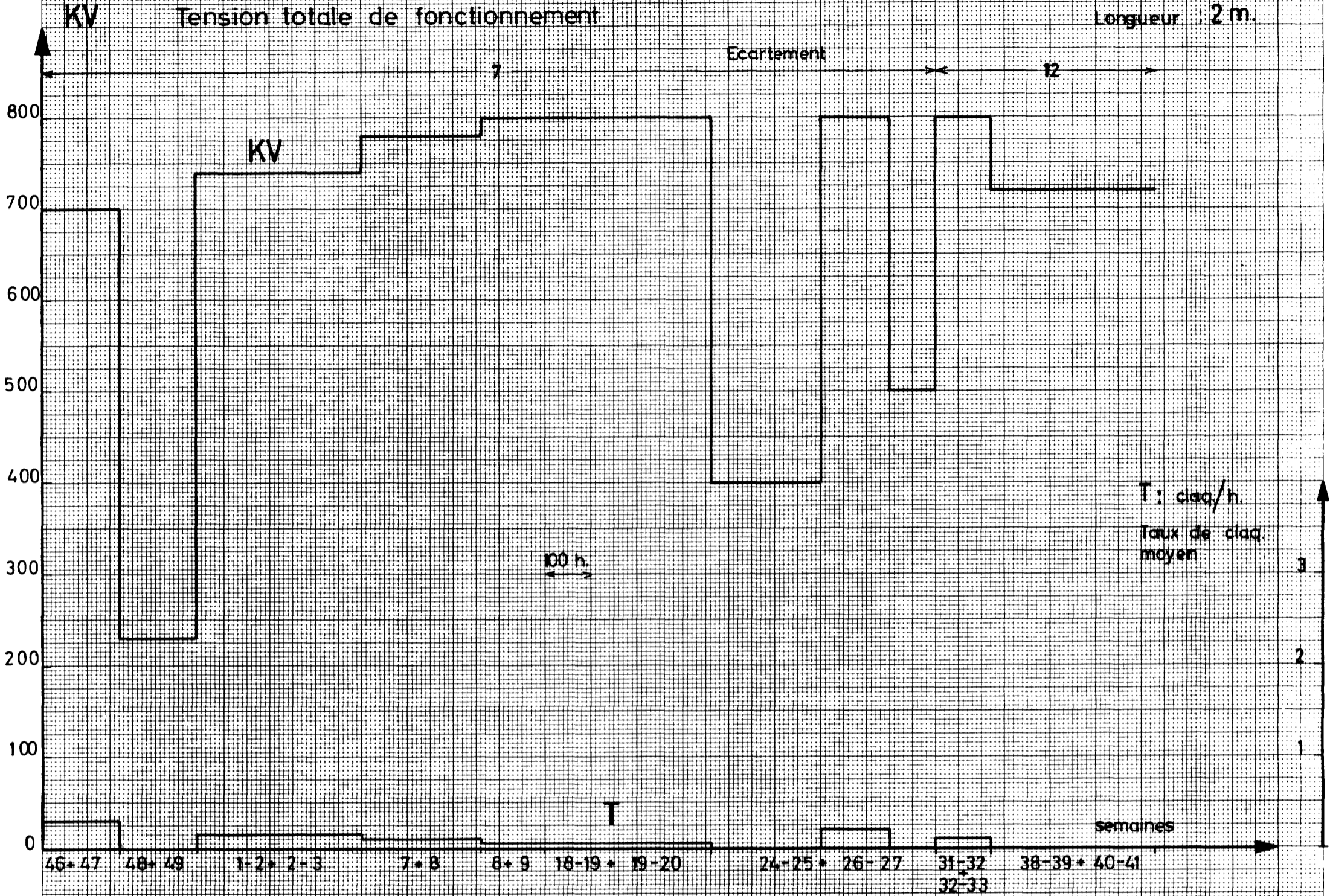


fig. 4

CAVITE "CALVADOS" 2m.

Faisceau : K11

Electrodes:
 anode, ac. inox
 cathode, alu oxyde

Longueur : 2 m

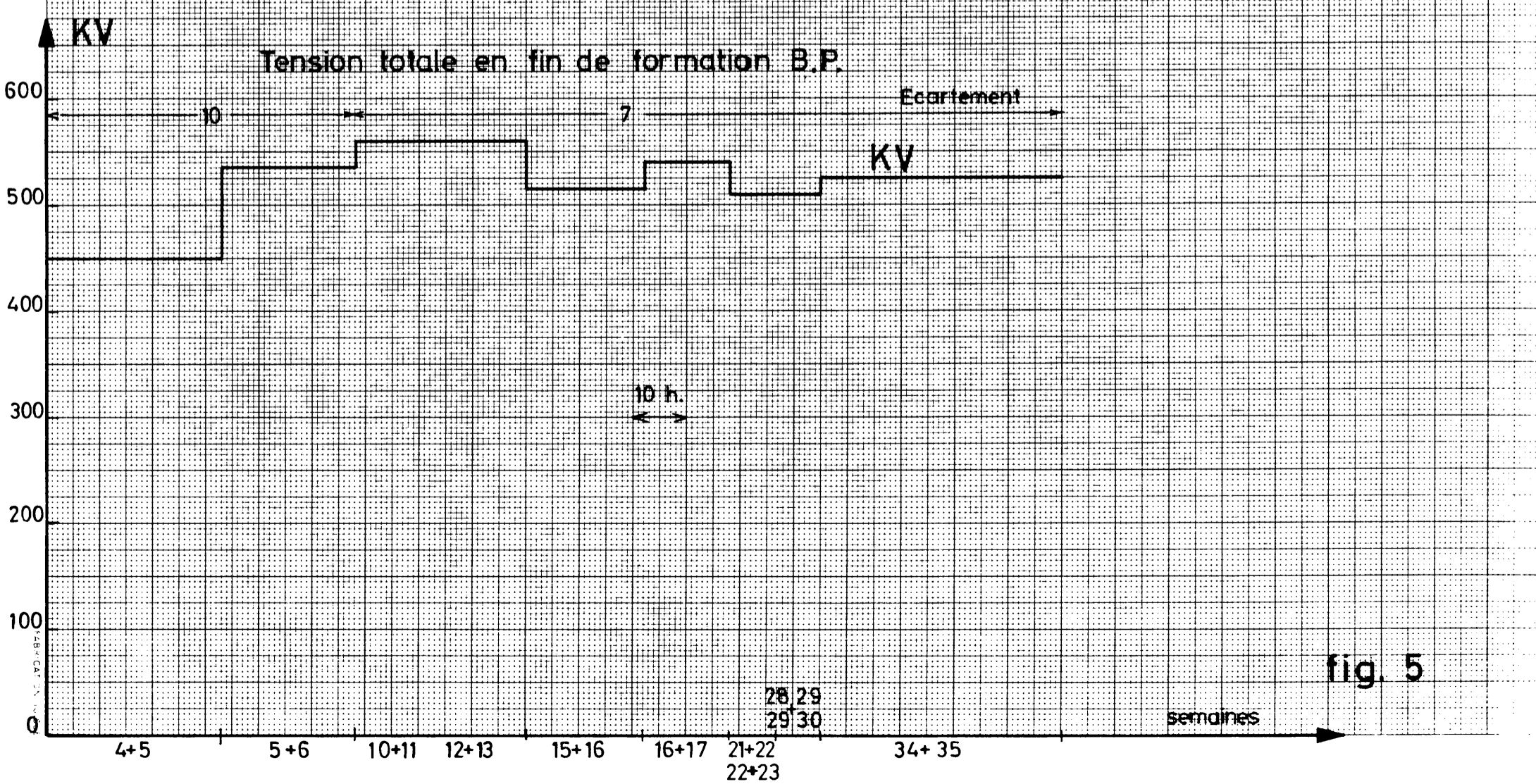
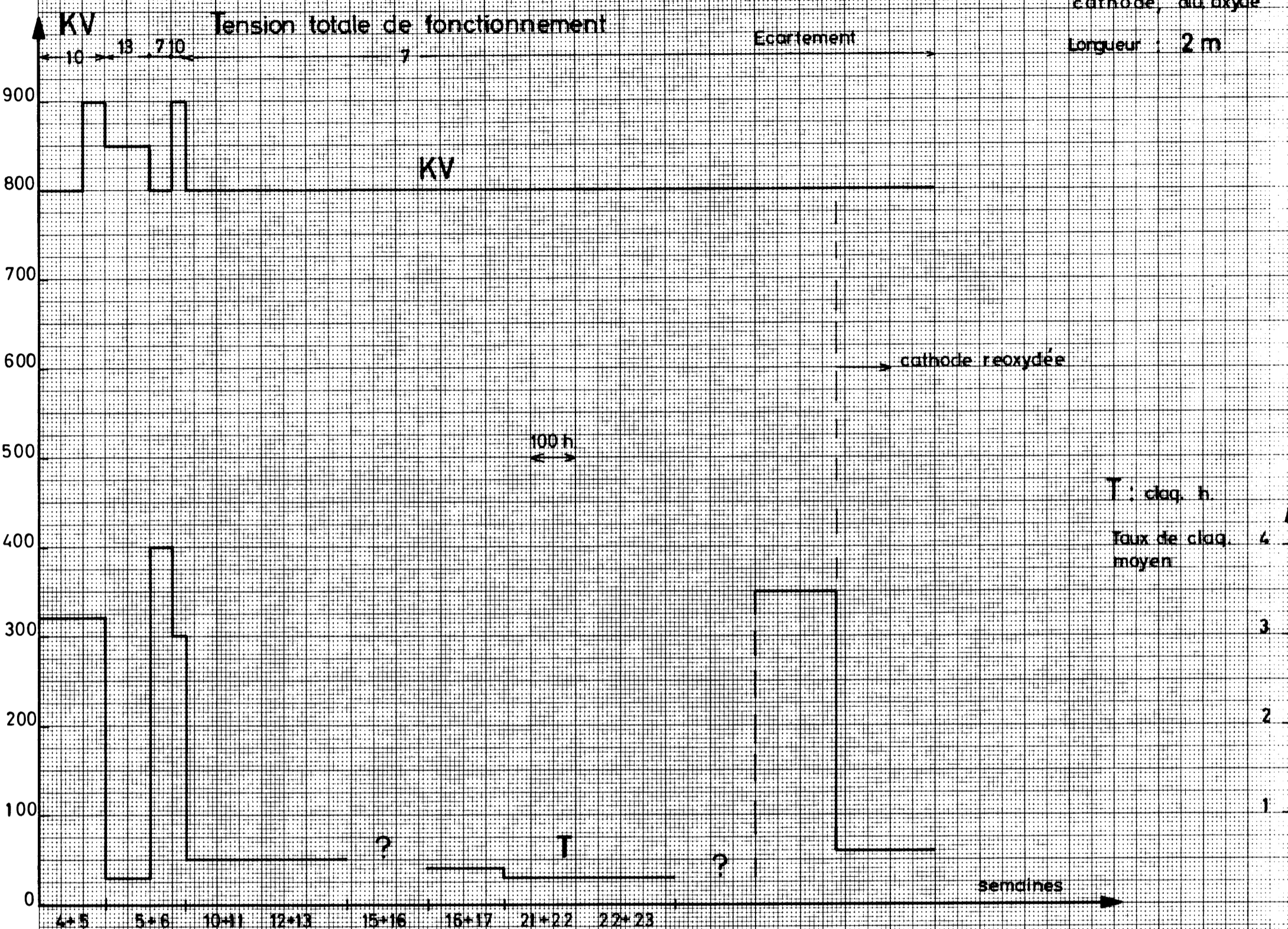


fig. 5

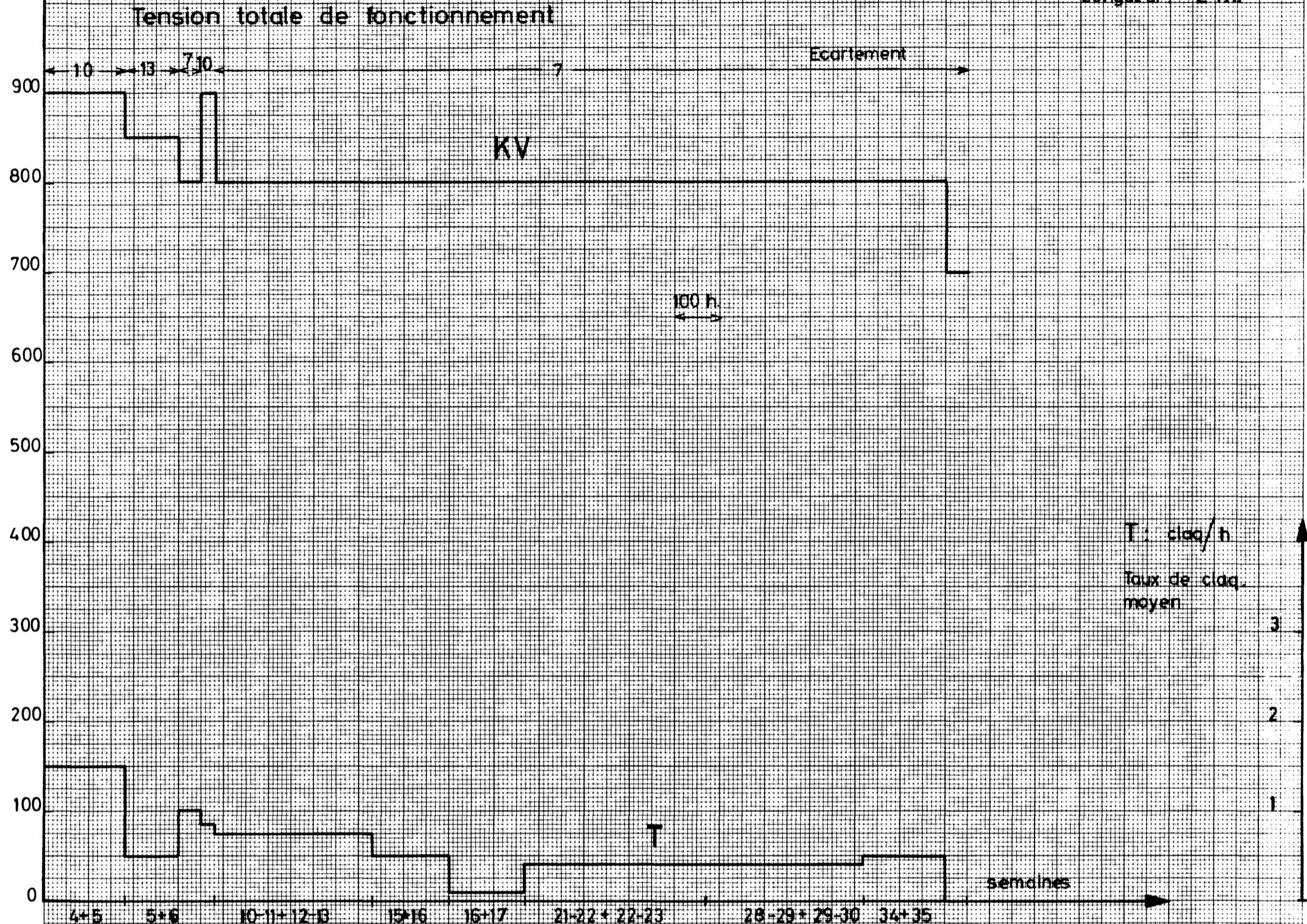
28,29
29,30

CAVITE "DOLE" 2 m.

Faisceau : K 11

Electrodes :
 anode : ac inox
 cathode : alu oxyde

Longueur : 2 m.



T : claq/h
 Taux de claq.
 moyen

3
 2
 1

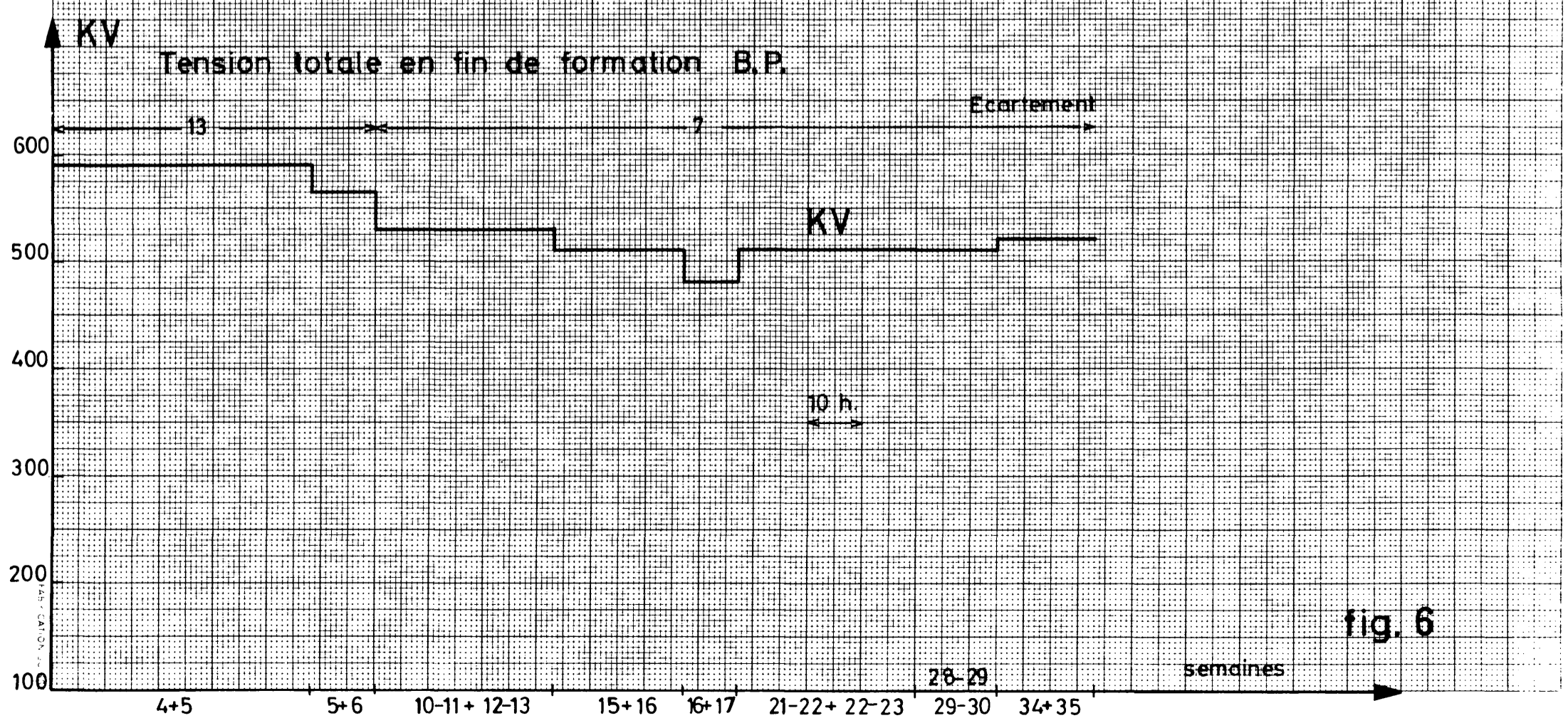


fig. 6