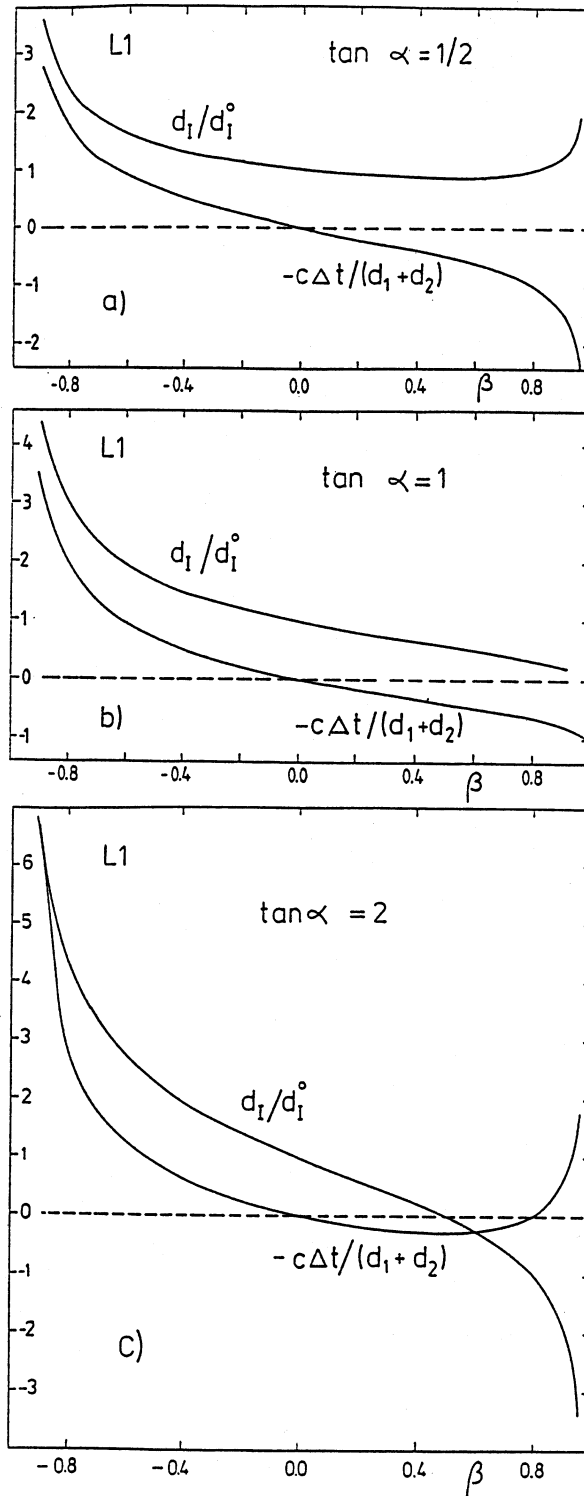


**Fig.5** Images of  $O_D$  observed when the lamp L1 is flashed while L1 and  $O_D$  are in uniform motion relative to the camera with velocity  $\beta c$  parallel to  $O_{x_1}$ . a),b),c) correspond to  $\tan \alpha = 1/2, 1, 2$  respectively. Comments as for Fig.3.



**Fig.6**  $d_I/d_I^0$  and  $-c\Delta t/(d_1+d_2)$  as a function of  $\beta$  for the conditions of Fig.5.  $d_I$  is the width parallel to  $O_{x_I}$  of the dotted rectangle in Fig.5, i.e. the width of the image when observed with coarse time resolution.  $\Delta t$  is the total duration of the moving image. a), b), c) are for  $\tan \alpha = 1/2, 1, 2$  respectively.

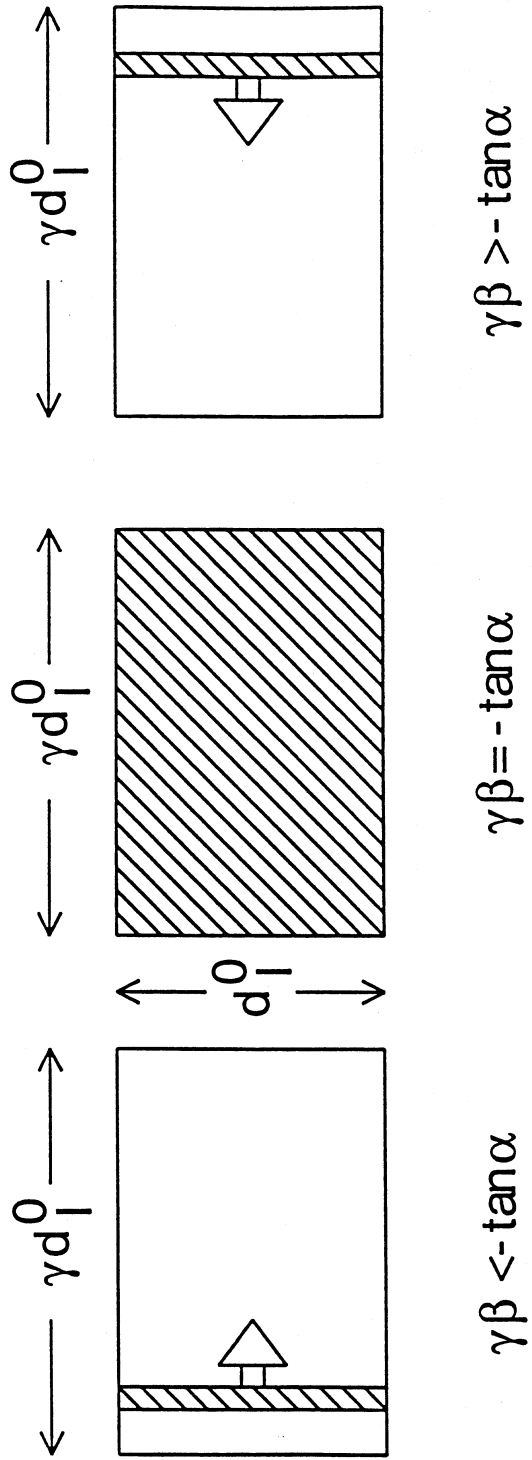


Fig. 7 Images of  $O_D$  observed when lamp  $L_2$  is flashed and  $L_2$  and  $O_D$  move as described in Fig. 5. Comments as for Fig. 3.

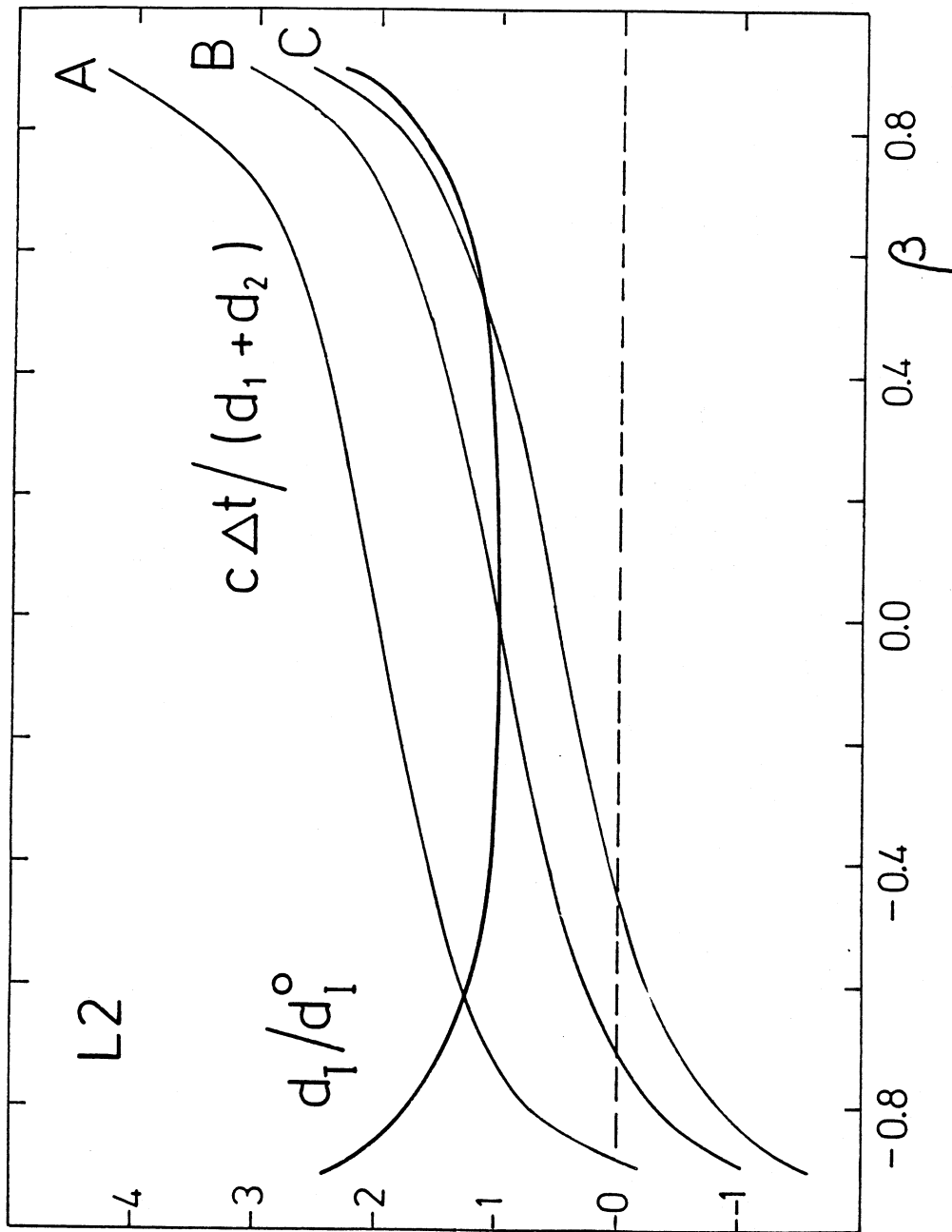
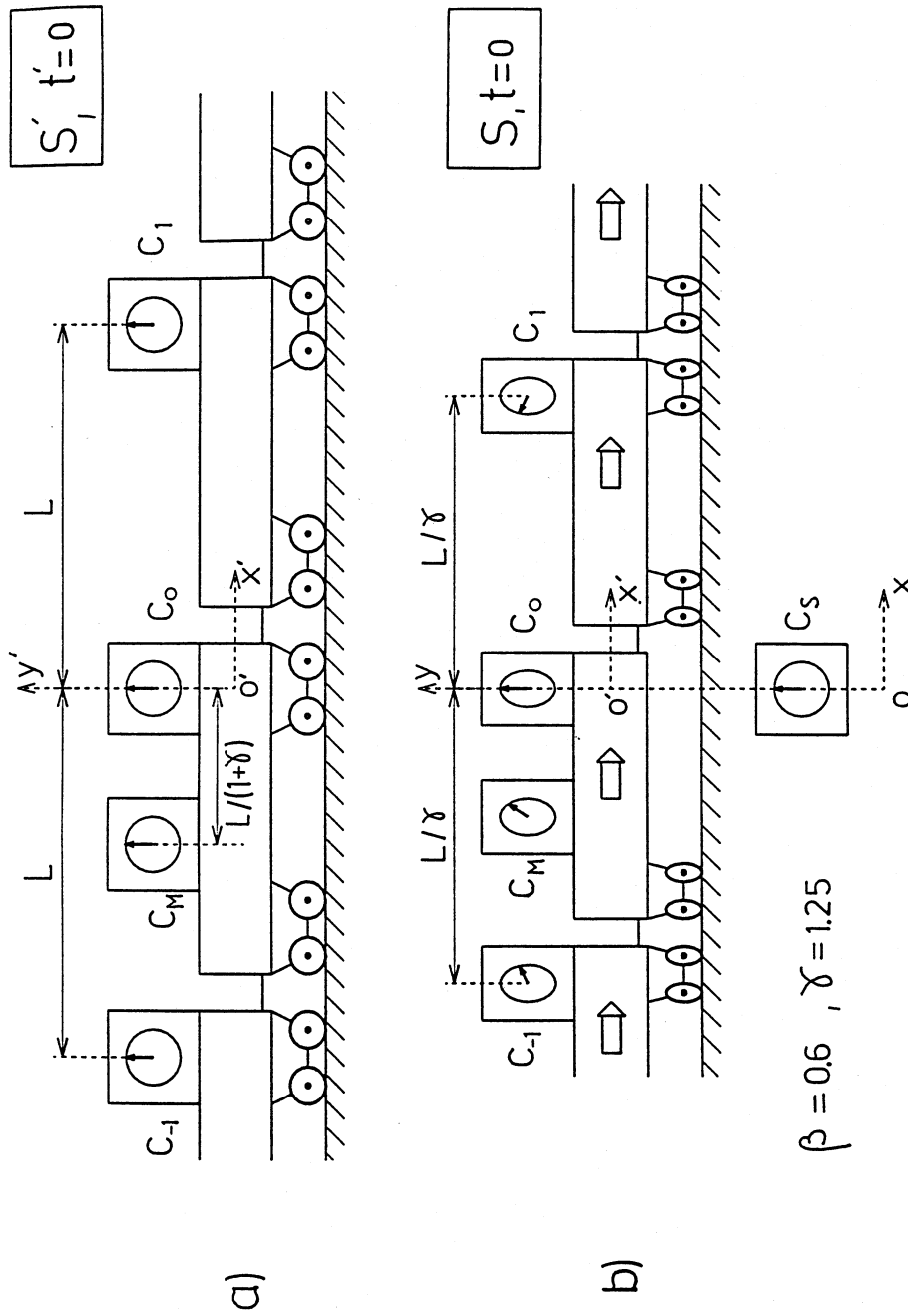


Fig.8  $d_1/d_1^0$  and  $-c\Delta t/(d_1 + d_2)$  as a function of  $\beta$  for the conditions of Fig.6. Heavy line:  $d_1/d_1^0$ . Lines A,B,C for  $\tan \alpha = 1/2, 1, 2$  respectively.



**Fig.9** a) Positions and times of equivalent clocks on the wagons of a train as seen by observers in the rest frame  $S'$  of the train (without the effects of LPTD).  
 b) The positions and times of the same clocks as seen by an observer in  $S$  (without the effects of LPTD). In  $S$  the train is moving to the right with velocity  $\beta c$ .

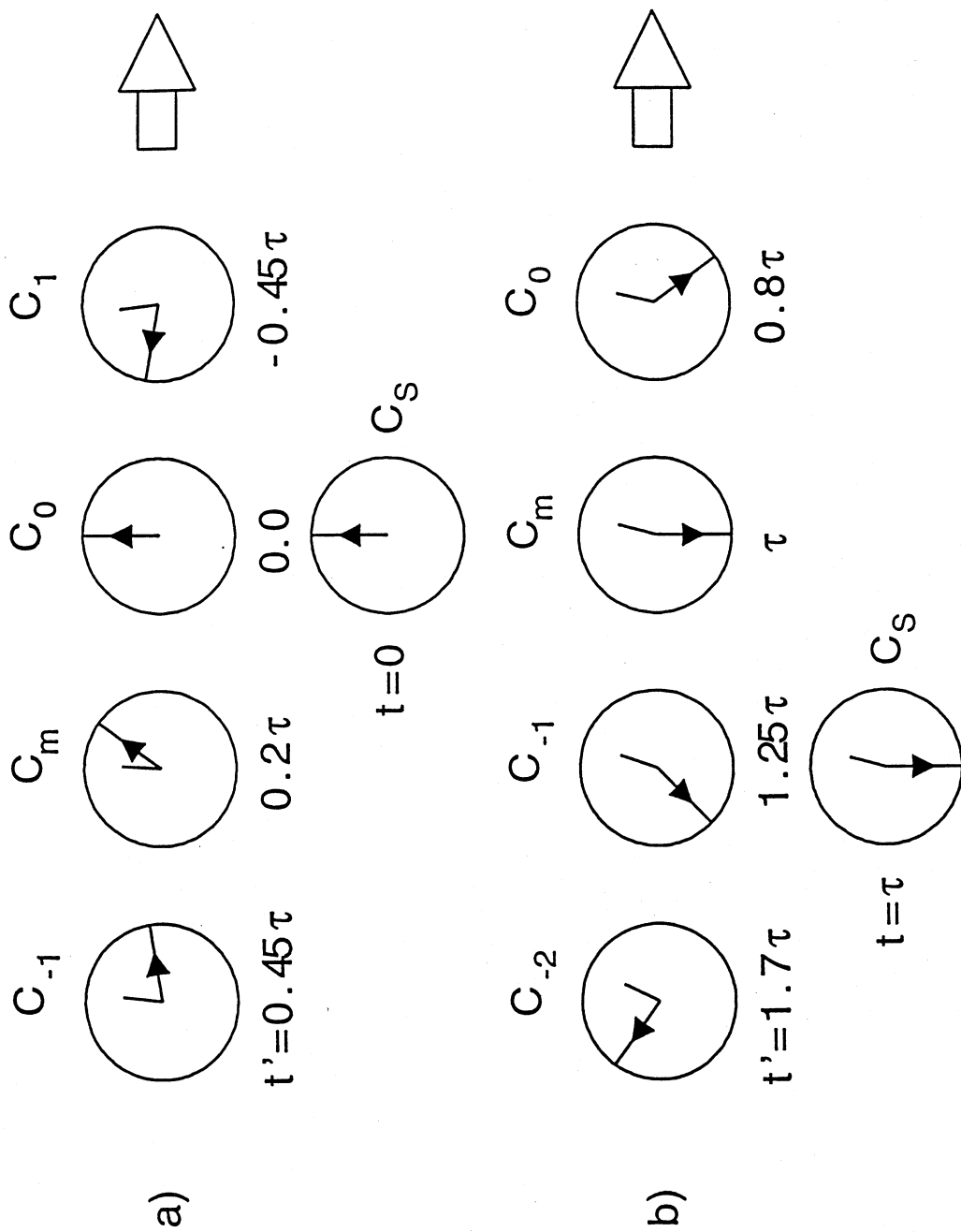


Fig.10 Equivalent clocks on the train as seen by an observer in S. a) at  $t = 0$ , b) at  $t = \tau$  (without the effects of LPTD).

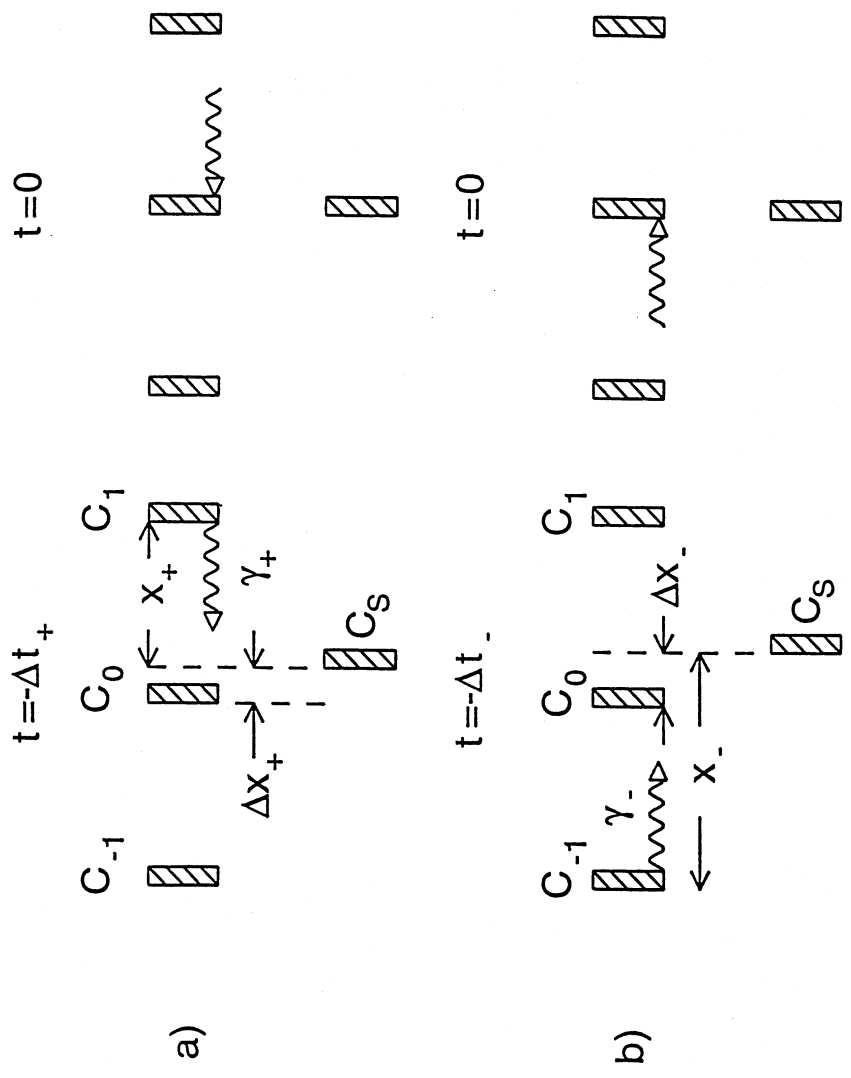


Fig.11 Propagation time delay effects. In a) the photon  $\gamma_+$  emitted by  $C_1$  at time  $t = -\Delta t_+$  arrives at the observer beside  $C_S$  at  $t = 0$ . Thus  $\Delta t_+ = x_+/c = \Delta x_+/v$ . In b) the photon  $\gamma_-$  emitted by  $C_{-1}$  at time  $t = -\Delta t_-$  also arrives at  $C_S$  at  $t = 0$ , and  $\Delta t_- = x_-/c = \Delta x_-/v$ . In a), [b)] the observed clock is receding from [approaching] the observer. Since evidently  $x_- > x_+$  it follows that  $\Delta t_- > \Delta t_+$  so that the effects of LPTD are larger for approaching than for receding clocks. A corollary (see Ref[5]) is that at  $t = 0$  the clock  $C_{-1}$  appears more distant than the clock  $C_1$ .

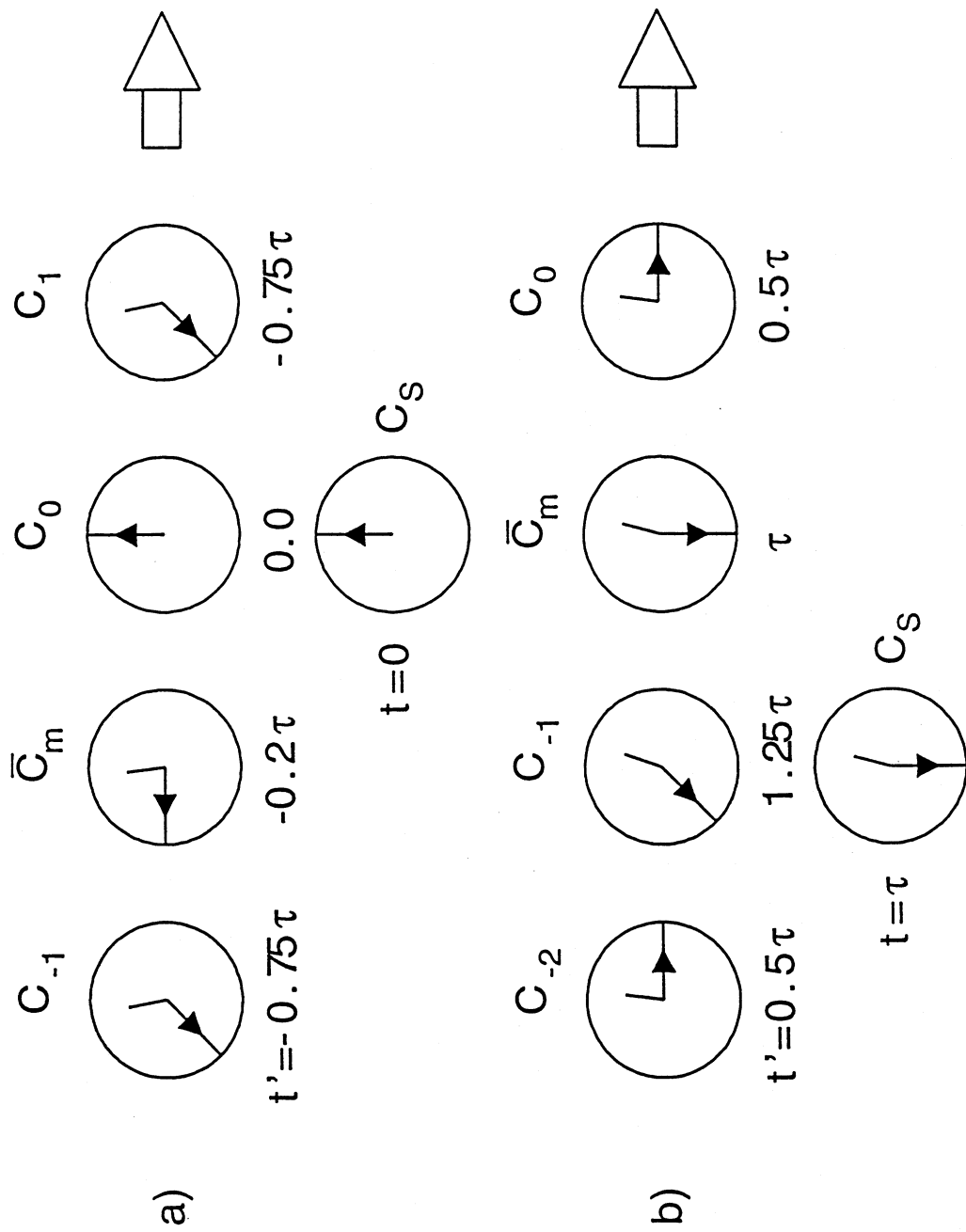


Fig.12 As Fig.10, but including the effects of LPTD.



$$\beta = 0$$

$$\tau = 1.33 \frac{L}{c}$$

$$\beta = 0.6$$

$$\tau = 1.33 \frac{L}{c}$$

$$\beta = 0.943$$

$$\tau = 0.354 \frac{L}{c}$$

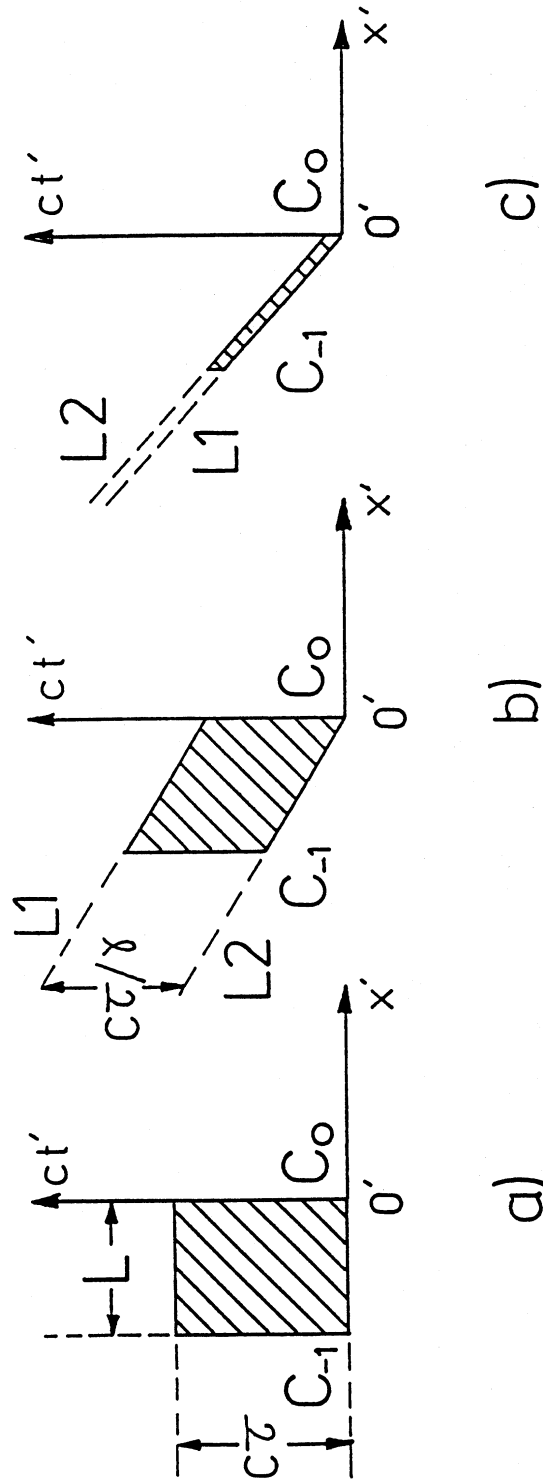


Fig.13 The domains of  $(x', ct')$  space (cross-hatched) of the wagon holding the clock  $C_0$  (see Fig.9) seen by an observer in  $S'$  during the time  $0 < t < \tau$ . a),b),c) are for  $\beta = 0, 0.6, 0.943$  respectively. Without effects of LPTD, as in the case of an observer at a large transverse distance from the train.

$$\beta = 0$$

$$\tau = 1.33 \frac{L}{c}$$

$$\beta = 0.6$$

$$\tau = 1.33 \frac{L}{c}$$

$$\beta = 0.943$$

$$\tau = 0.354 \frac{L}{c}$$

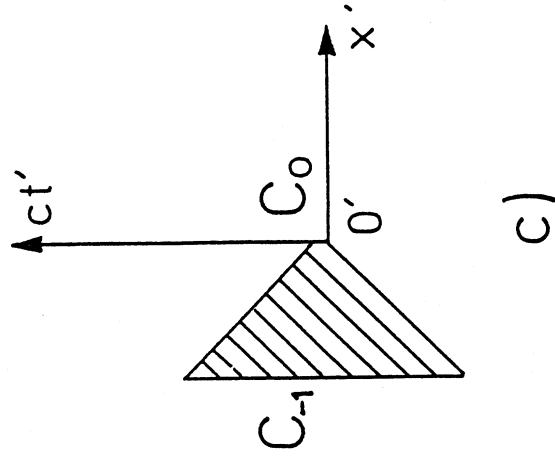
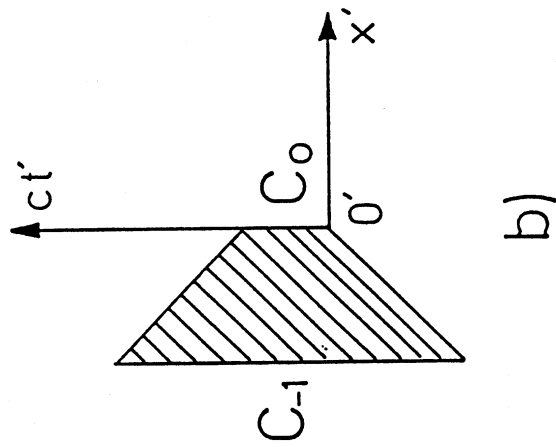
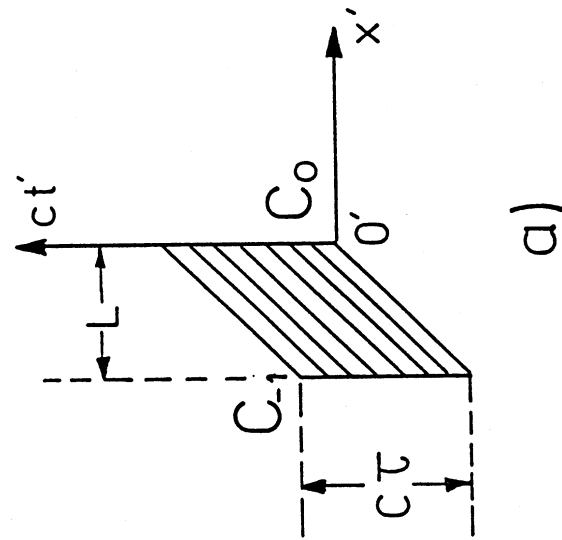


Fig.14 As Fig.13, for an observer close to the train, and including the effects of LPTD.