There's less here than meets the eye. He's not deriving much of anything; he's just finding the derivatives in the Greek coordinate system.

I'll work through the first equation he gives here. I haven't done the rest but I think they follow similarly. It's a mess, but all we're doing is applying the chain rule a few times and plugging in Maxwell's equations in the Latin frame in order to get the derivatives of the Latin (unprimed) functions X,Y,Z,L,N,M in terms of the Greek coordinates.

First we have the X component of the partial of the E field:

$$(1)\quad \frac{1}{c}\frac{\partial x}{\partial t} = \frac{\partial N}{\partial y} - \frac{\partial M}{\partial z}$$

And we'll need an equation Einstein didn't bother to write down right here, which is the divergence of the E field:

$$(2)\quad \begin{aligned} &\frac{\partial X}{\partial x} + \frac{\partial Y}{\partial y} + \frac{\partial Z}{\partial z} = 0 \\ &\frac{\partial X}{\partial x} = -\left[\frac{\partial Y}{\partial y} + \frac{\partial Z}{\partial z}\right] \end{aligned}$$

And we have the transforms between the Latin and Greek frames:

$$(3)\quad \begin{aligned} t &= \beta\left(\tau + \frac{v}{c}\xi\right) \\ x &= \beta\left(\xi + \frac{v}{c}\tau\right) \\ y &= \eta \\ z &= \zeta \end{aligned}$$

$$(4)\quad \begin{aligned} \tau &= \beta\left(t - \frac{v}{c}x\right) \\ \xi &= \beta\left(x - \frac{v}{c}t\right) \end{aligned}$$

Now let's write the partial derivative of X with respect to tau (this has nothing to do with Maxwell's equations; this would be true for any function X):

$$(5)\quad \frac{\partial X}{\partial \tau} = \frac{\partial X}{\partial t}\frac{\partial t}{\partial \tau} + \frac{\partial X}{\partial x}\frac{\partial x}{\partial \tau} + \frac{\partial X}{\partial y}\frac{\partial y}{\partial \tau} + \frac{\partial X}{\partial z}\frac{\partial z}{\partial \tau}$$

From the transformations (3) given above, we have

$$\frac{\partial t}{\partial \tau} = \beta$$

(6) $$\frac{\partial x}{\partial \tau} = \beta \frac{v}{c}$$

$$\frac{\partial y}{\partial \tau} = \frac{\partial z}{\partial \tau} = 0$$

Plugging (6) into (5) and dropping out the zero terms, we have

(7) $$\frac{\partial X}{\partial \tau} = \beta \left[\frac{\partial X}{\partial t} + \frac{v}{c} \frac{\partial X}{\partial x} \right]$$

Now we substitute (1) and (2) into (7), multiply both sides by “1/c”, and replace “y” and “z” with eta and zeta, to obtain

$$\frac{1}{c} \frac{\partial X}{\partial \tau} = \beta \left[\frac{\partial N}{\partial \eta} - \frac{\partial M}{\partial \zeta} - \frac{v}{c^2} \left(\frac{\partial Y}{\partial \eta} + \frac{\partial Z}{\partial \zeta} \right) \right]$$

which, with a little rearranging, is the first of the transformed equations Einstein gives,

$$\frac{1}{c} \frac{\partial X}{\partial \tau} = \frac{\partial}{\partial \eta} \left[\beta \left(N - \frac{v}{c} Y \right) \right] - \frac{\partial}{\partial \zeta} \left[\beta \left(M + \frac{v}{c} Z \right) \right]$$

except that, as usual, I messed up a factor of “c” someplace. (I much prefer to set c=1; then it doesn't matter if I blow a constant multiple of “c” somewhere...)

As I said, I think the rest of the them follow the same way but I haven't worked them all through in this detail.