The Spontaneous Symmetry Breaking Mechanism (SSBM) is an important ingredient of the Standard Model of particle physics. Until now, it is the only convincing procedure which permits one to implement mass generation to vector bosons and fermions without getting in trouble with renormalizability.

From a technical point of view, what is called the unitary gauge has been used to exhibit and understand the particle content of this model in that it permits to write the Lagrangian in terms of fields which have definite charges under the remaining $U(1)$-gauge group.

In this note, we propose to reconsider the SSBM of the Standard Model in the unitary gauge. The computation we present seems to be a better way to manage this unitary gauge, in that on one hand it simplifies the presentation and on the other hand it makes manifest a possible different interpretation of this mechanism. Because this computation does not need any reference to the quantized version of the theory, we will explicitly stay at the classical level of the theory.

The salient feature of this computation is that the $SU(2)$ symmetry is not broken in the usual way but it is *factored out* in the final Lagrangian. In that respect, it helps to display the reason why a part of the symmetry disappears without making some arbitrary choice, for instance for the fundamental configuration of some fields or for the specific value of the vacuum of the theory. As a direct consequence, the SSBM of the Standard Model should be better interpreted as a *decoupling* of a symmetry. This computation also exhibits, as expected, the residual $U(1)$ symmetry and it shows how this group acts on the fields.

There is no new technicalities in this computation. At the classical level, the Lagrangians in the symmetric phase and in the broken phase are the usual ones. In our computation which connects these two Lagrangians, the key point is to take the unitary gauge for what it is from a mathematical point of view, and then to perform the necessary technical steps as they present themselves. As we shall see, some confusion may have been widespread in the literature about a so-called gauge transformation used in the computation. This point is clarified in the text because it is at the heart of the possible two routes (the usual one and our) which lead to the Lagrangian in the broken phase.

For explanatory reasons, this paper focuses only on a specific part of the Lagrangian of the Standard Model of particles. But in fact it can be easily seen that this computation can be adapted to the complete Lagrangian of the Standard Model, and to certain classes of Lagrangians where a SSBM occurs. A systematic and more mathematical study of this