How does a whipped cream charger work?

The skimmer expands the gas. Add tiny air bubbles as you whip the whipped cream. The cream traps the air and essentially becomes the matrix that encloses it: the foam. it does the same thing in a completely different way.

When loading the tamper, there is a high gas pressure in the cream. The cream actually absorbs the nitrous oxide that you put in it. Because of the pressure, it can be assumed that the gas is actually absorbing very small bubbles in the cream.

So you have a gas and cream matrix, but because the bubbles are so small, it's basically a cream. Chilled liquids absorb high-pressure gases more easily, so using cold cream and keeping it in the refrigerator is a good idea.

A little stirring exposes the gas to more cream and so improves absorption. Once the cream is released from the machine, the absorbed gas expands rapidly, the bubbles get bigger and the ratio of cream to bubble is more like the foam we know as whipped cream. pure and boring air in the bubbles.

Why laughing gas? As I understand it, it's because it's the cheapest non-toxic, odourless, tasteless gas you can get. Carbon dioxide would almost be a good choice, but unfortunately, it's bitter. It doesn't go well with cream.

Why is Too Much Shaking a Bad Thing? I'm not sure exactly, but I know what happens when you whip cream with a mixer, you make butter. Maybe gas or high pressure is good for this conversion, or you mix it so much if you agitate it excessively.