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to their distances. This discovery was based upon ~~the~~ shift in the spectrum from the distant galaxies. In effect, similar to ... The effect that we notice when ~~that~~ a train moves further ~~w~~ away from us, and the sound of it goes into a higher pitch or coming nearer, it moves into lower pitch. Hubble decided that every galaxy is increasing its speed away from us at a rate of 100 miles a second per so many thousands of light years of distance.

It is easy to see how the ~~expl~~ explosion theory would be a natural result of this discovery of expansion. However, the other ~~two~~ two theories say that we are not justified in ~~extrapolating~~ extrapolating the present situation so far back as to say that it all came from one tiny primieval atom, but suggests another way of getting around it. The basic theory of the expanding universe is a little difficult for a layman to grasp until he is given an analogy. The one which is found in most of the books on the subject is a very good one. According to this one, it is like a toy ~~bal~~ baloon. Here is a toy baloon with pictures on it, and the little rubber baloon might be only two inches in the diameter. However, if one begins to pull into it, it can grow to five to three, ~~fix~~ five, perhaps six even ten inches in diameter. As the baloon grows, ~~the~~ all parts of the pictures on the surface spread out until with every part of it increasing its distance from every other part, and increasing further away ~~two~~ two parts are from one another, the more rapidly the distance between them increases. Of course, the ~~theory~~ theory of the expanding universe does not believe that the galaxies are expanding, they are held together by the force of gravity and are conceived of as moving around their center, but it is the relation of these two each other which is similar to the pictures on the ~~surface~~ front of the baloon. Usually, stated, this analogy has the imperfection to it, that is, it is only on ~~the~~ a two ~~mx~~ dimensional ~~fx~~ surface and of course, the universe