## Another Illustration of Einstein's Theory.

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A consideration of this theory leads me to the conclusion that a very simple illustration of the bending of light rays where a body is accelerated should be obtainable by sitting in a motor car on a rainy day and looking at the rain against a dark background of buildings. Suppose, for arguments sake, that the rain is descending vertically; if the car is at rest it will appear vertical, but if not then at some angle depending only on the momentary speed of the car, which angle of cant may be determined by an easy application of the parallelogram of velocities. It would seem, therefore, that as the motion of the car is accelerated the stream of drops should cant over as a whole the angle at which the rain appears to fall depending on the speed of the car at the moment, and this is in fact what is seen when the acceleration is small and would doubtless always be seen, whatever the acceleration if what our eyes actually see in a rain shower were a stream of falling drops. What we do see, however, is a number of paths described by single drops, just as in swishing a cane through the air we see the path it describes. Since the image on the retina of the eye takes an appreciable fraction of a second to fade. Thus it would appear that if we could obtain an acceleration sufficiently great for our purpose the paths of the rain drops should appear curved. I calculate that in an ordinary shower this effect should be visible from a motor car at the moment of starting from rest with the greatest possible acceleration.

As I am always in the hills during the rains, perhaps some Calcutta members will be kind enough to confirm this theory or the reverse. There is, of course, no necessity to wait until the rain is descending vertically, the effect should be there in any case and would probably be most noticeable under the conditions illustrated in the diagram below :—

True direction of rain.

Direction of cur. of motor car
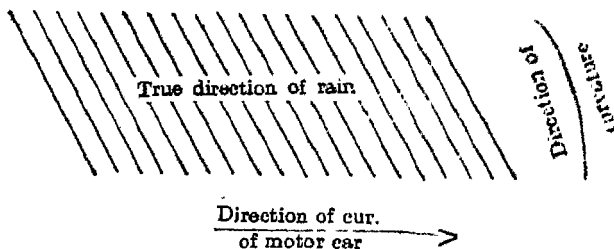
The amount of curvature is difficult to predict, but would probably be somewhat le s than shown here.