

condensed and rained down again. Also, part of that which soaks in the ground returns when the surface becomes dry, and is evaporated. But, not to be too precise, let us attempt to follow the water which soaks in. First of all, it must have dissolved some substances with which it came in contact at the surface. These substances must be, to a limited extent certain mineral constituents of the Drift; but the Drift has been so many thousand years exposed to rains, that all its readily soluble constituents have been dissolved away from the surface. The chief agencies which supply soluble matters to the surface are man and animals. The underground waters, therefore, carry with them a certain amount of solutions of organic and inorganic origin, and are not absolutely pure, like carefully distilled water. They may even be poisonous and unsanitary.

Following these waters in thought, beneath the surface, we see them percolating through the sands and gravels, which we have found to make up the principal part of the upper Drift. Through layer after layer they continue to descend. If any obstruction is encountered, they are quickly deflected around it, and so continue to settle toward the impervious Boulder Clay at the bottom of the Drift; or, if that is absent, the waters settle to the bed-rock. We will not attempt, at present, to follow them in the rocks.

Now, we know that the Drift contains sheets of impervious clay. Of course, then, these intercept the descending water. The water arrested by a clay-bed saturates the overlying sand, and gradually flows along the surface of the clay to a lower level. But we have seen that all these Drift beds are of quite limited extent. The water, therefore, soon reaches the edge of the clay-bed and escapes down to a lower level. Probably it is again intercepted by a deeper clay-bed. Along this it flows in a similar way, and so continues—always approaching nearer and nearer to the lower limit of the Drift. Some of the clay-beds are concave upward, and thus form real dishes or cisterns, which remain full.

Suppose we dig a well. While passing through the sandy