

be elevated, will not the brine be forced up by hydrostatic pressure? I admit that if the borders were elevated *on all sides* above the place of boring, such would be the case. But if the borders were thus elevated, we should have an area without surface drainage; and, instead of being a place for salt-making operations, it would be the bed of a sea or lake. The supposed condition is therefore incompatible with the hypothesis of well-boring. If we assume the existence of a single gap in the encircling rim through which the surface waters may be carried off, it must be borne in mind that this gap will also drain the brine-formation to the same level. The sheet of brine will not, therefore, rise to a higher level than the place of boring; and if the elevated rim become charged with fresh waters, they can be of no avail for hydrostatic pressure, since the notch is an outlet through which the pressure would find relief at that level. Of necessity, then, the place of boring must be somewhat higher than the continuous rim of the saliferous basin, and the brine can only be brought to the surface by the pump. In penetrating to the deep-seated reservoir of brine, other water-bearing strata may be passed whose elevation, at some point more or less remote, may be such as to originate an Artesian overflow. In working the deep brine, this water must either be stopped off, or a closed tube must be sunk through the midst of it to the brine formation, where it must be closely packed around, to prevent communication with the fresh waters above.

One other consideration should be mentioned. The brine is not always—nor generally—found in the formation in which the salt was originally deposited. When, on the elevation of the continent, meteoric waters percolated through the strata and redissolved the salt, the solution would be retained in the same formation only on the con-