yards and at about 20 feet lower level, and also associated with Glauber-salt, which, it is worthy of notice, is generally met with here, according to the quarrymen, in narrow seams at the line of junction of the "hard plaster," (Anhydrite) with the soft "plaster," (Gypsum). I detected it in the form of an opaque white substance without lustre, and, to the naked eye, devoid of crystalline structure, in cakes and somewhat rounded masses varying in size from that of a small pea to that of a bean; these masses lay between gypsum and crystals of Glauber-salt, taking shape from the crystals of the latter on the side next to them, and when detached from them leaving their faces, as it were, etched, and sometimes the crystals were penetrated to a considerable depth by the imbedded borate. The mineral is very soft, (H = 1) but coherent, tasteless, slightly tough between the teeth, fuses readily B.B. to a clear bead, insoluble in water, soluble in HCl. As found, or very soon after being brought home, it lost by exposure to air, Water = 18·36 per cent,
and the air dry substances gave the following results on analysis; the water was determined by ignition, the lime, magnesia and sulphuric acid in one portion of the ignited residue, and the soda in another, after its treatment with fluor-spar and sulphuric acid for separation of boracic acid, which was, of course, estimated by deficiency:

| | I. | II. |
|---|---|---|
| Lime, | 14·21 | —— |
| Soda, | 7·25 | —— |
| Sulphuric acid, | 3·98 | —— |
| Magnesia | 0·62 | —— |
| Water, | 19·96 | 20·78 |
| Boracic acid, | 53·98 | —— |
| | 100·00 | |

The quantity of mineral obtained did not permit me to make more than one analysis, and retain a little as a specimen for identification, but these results as well as the characters already mentioned, and the crystalline structure to which I shall presently advert, are, I think, sufficient to show that it is specifically distinct from Natro boro-calcite (see analyses quoted.) On the assumption that the magnesia and sulphuric acid are accidental, and that the latter is combined with the former and with a quantity of soda equivalent to that of the acid not required by the magnesia, I have calculated the preceding results (I) after making