strata may perhaps be more readily explained by the action of water which has dissolved or worn away portions of the gypsum, and allowed the shales, etc., to occupy the cavities thus formed. The gypsum frequently presents deep funnel-shaped holes, which contain water, and on examination yield bones of deer and other animals.

The hydration of the gypsum a short distance below the surface would be a comparatively slow operation, even now not completed at its outcrop, and the expansion would be spent more in binding the strata than in its fracture.

APPLICATION OF THE GYPSUM.

The uses to which gypsum is put are so much the same in every country that a detailed list would merely express the information already possessed by the members. The soft blue and white varieties are largely exported, to be ground for agricultural purposes. It is considered in the Southern States to be a valuable adjunct to the growth of cotton and tobacco. It is also much used as a top dressing, in the Northern States and the Provinces of Quebec and Ontario.

In Nova Scotia itself certain districts have been well served with this enricher in a remarkable manner. In the Bay of Fundy, which separates Nova Scotia and New Brunswick, the tides rise to a height of from 40 to 60 feet, and from the rapidity of their movements exert a powerfully erosive effect on every stratum exposed to their action.

Great part of the Lower Carboniferous marine limestone formation of Nova Scotia is penetrated by it, or drained by its tributaries; thus large quantities of the limestone, gypsum, and marl have been denuded and re-arranged in large meadows covering many thousand acres. These have been protected from inundation by large dykes, and present a soil of unsurpassed fertility. Constant additions are being made to these meadows by the unceasing denudation.

In addition to this, its dissemination, together with limestone and clay through the overlying soils, have rendered large districts in Cumberland, Pictou, Hants, and Antigonish, and parts of Cape Breton, capable of producing, when efficiently worked, more than average crops of the more common grains and roots.

The compact white gypsum and selenite is used for finishing walls, for cornices, etc. No more suitable place than Nova Scotia could be selected for the manufacture of those cements into which gypsum enters, as the mineral is cheap and of every grade of quality.