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The Meteorite that Shaped Cape Breton Cape Breton Island is so beautiful that it is rare for anyone to ask why it is like it is. But if you do ask the question, you will find that there is much more to Cape Breton than meets the eye. For example, the Bras d'Or Lakes are salt, and you might think that this is quite normal since they are connected to the open sea. But when you start calculating the amount of rainfall, the amount of freshwater entering the Lakes, and the amount of sea water entering the Lakes, you find that the amount of salt required is about 2k million tons per year short, and the Lakes should be fresh water • not salt. So you search around and you find that at various places there are streams of brine welling up under the lake, and it is these that keep it .salt. Perhaps you get to wondering how long you can go on extracting 2k million tons of salt per year from whatever deposit lies under the Lakes, and what would happen if the supply of salt did run out. Then maybe you start to wonder not only why the Lakes are salt, but why the lake is there at all. You may, like myself, put two and two together and come up with the answer of four, sometimes twenty-two depending on your mood, and think that your answer is right and may be interesting to other people and so you decide to write it all down, not with the idea, of course, of stating flatly that "This is the way it happened," but rather, "This is the way it might have happened." In the remote ages of the Earth, according to recent theories, all the great continents were joined together in one huge land mass, which finally broke up into the continents which are known today. The continent of the Americas drifted slowly away from what is now Europe and Africa leaving a great gulf which filled with water and became the Atlantic Ocean. Cape Breton apparently trailed along behind the main mass rather like a chip of wood which rides along behind a floating log. If you look carefully at a map of North America, Cape Breton Island looks out of position; that is, it is almost at right angles to the main peninsula of Nova Scotia. It certainly does look as if it were a separately floating chip which didn't apply the brakes soon enough. The geology of Cape Breton, although very similar to Nova Scotia, is just different enough to make the separate chip theory tenable. Perhaps it was part of Scotland at one time or maybe Cornwall. It would be nice if it was, because so many Scots and Cornishmen came to Cape Breton to live. However, it isn't very important because once it arrived in its present position, it was subject to whatever geological influences were at work on the main land mass of North America. Several times the Island was buried, along with Nova Scotia, under huge glaciers, the result of the various ice ages which ploughed off most of the mountains and the younger rocks right down to the basal granite. It must have been a very different place before the first ice-age, because from the way the basic rock tilts around Halifax, we believe that that part of Nova Scotia was a huge mountain • estimated to be over 20,000 feet high, which would have been clearly visible from Cape Breton. In fact, it is highly probable that Cape Breton was in the foothills of this huge mountain range. All this has now gone and we can only try to imagine the scenery of that far-off time and the titanic force of the glaciers which could scrape away a 20,000-foot granite



mountain leaving it flat and level. Finally, the climate .changed once more and the glaciers retreated again, leaving Cape Breton free of ice. This had a peculiar effect on the Island. The huge weight of ice had pressed the land downward into the sea of molten rock which is underneath the earth's crust, and once relieved of this weight the whole island started to rise. But it did not rise evenly. The northern part rose much faster thain the southern part, so the island tilted. If you draw a line from Capstick in the north to say Capelin Cove in the south, and you make a scale drawing of the land contours under that line, you will be able to place a straight edge over the hills and no hill will rise above it. That is, you can clearly see that it was once flat and level but has now tilted. If you do