

along the streams." Wherever these clay formations exist along the river the shells *Saxicava rugosa* and *Tellina Grœnlandica* are to be found, and in a bed of clay at Green's Creek nodular masses exist in considerable abundance. The most common fossil embedded in these, is the *Mallotus villosus* or capeling of the Lower St. Lawrence. This capeling is also found in nodules, in clay, on the Chaudière Lake, 183 feet; on the Madawaska at 206 feet; and at Fort Coulonge Lake, at 365 feet above the sea. This formation contains also various other fossils. On the north side of the Ottawa, from Hull to Isle Jesus, this clay formation covers a considerable breadth between the Laurentian Hills and the river. It can also be traced in considerable abundance along the banks of the Gatineau and River Rouge. In the former locality it is well known to the lumberers, who in wet weather describe it as the sticking clay of the Gatineau. A well-defined hill of clay exists on the front and to the left of the General Protestant Hospital, facing the Rideau River, and to the rear an extensive mound of sand, both of which are drift formations. The boulder formation or glacial drift, both in the British Isles and North America, is referred by Lyell to the age of the newer pliocene, of which it marks its close; while the stratified deposits which overlie it, consisting partly of boulder formation re-arranged by water, are placed among Post-tertiary strata. The records of the drift or boulder period extend over North America, north of parallel 40°, as well as over all the northern counties of Europe, and the various boulders have been moved from the north towards the south. Throughout the regions occupied by the drift, the rocks in place are more or less polished, striated, or grooved. These marks are observed on the consolidated formations that appear at the surface, and constitute a very essential part of the records of this period. These sedimentary rocks, the result of aqueous action, are determined by occurring in *beds or strata*, by *exhibiting a sedimentary structure* and *containing the remains of animal organisation*.—(See *Plate*.)