Explanation of Plate 20.

Section 1—A sketch section across the strike from Lorette to Lévis in a southeasterly direction (see also Bull. Geol. Soc. Am., vol. 1, p. 464, map accompanying Dr. Ells' paper). It includes the following terranes in their geographical sequence, beginning toward the northwest: *a*. Laurentian or Archean; *b*. Trenton; *c*. Utica; *d*. Lorraine (Hudson River of most geologists); *e*. Quebec (new terrane, separate from others); *f*. Lévis; and *g*. Sillery. The last three, *e*, *f*, and *g*, form part and parcel of the fossiliferous Quebec group, while *b*, *c*, and *d* form the Trenton group, which are separated by a fault—the great Appalachian fault (the "Quebec fault" of Ells, or the St. Lawrence and Champlain fault, or a branch of it, of other geologists).

Section 2—Sketch section at Montmorency falls, across the measures east of the gorge and across the Island of Orleans. The notation is the same as in section 1. The Utica shales are much disturbed here, both in their contact with the Trenton below and with the Lorraine shales above. Below the horizontal Trenton, capping the Laurentian gneiss, there are found calcareous sandstones of Trenton age, which have been called Potsdam "quartzites." A downthrow fault passes in front of the bluff over which the waters fall.

Section 3—Sketch section across the measures near Montcalm market, Quebec city, showing the high angle of dip and the shales with limestones interstratified.

Section 4—A general view of the strata flanking the Citadel hill at the landslide of 1889. The structure there exhibited is that of an inclined denuded anticline.

Section 5—Sketch section through the calcareo-bituminous rocks and compact shales, with conglomeratic cherty bands associated, at Côte d'Abraham, where the monticuliporidæ have been obtained.

Section 6—Sketch section showing the thin, fissile and soft earthy shales of the Lorraine terrane—newer than the Utica—inclined at a considerable angle along the road at Côte Sauvageau, west of Martelle tower no. 4.

Section 7—Sketch section exhibiting the dying out of the outcrop of Lorraine or newer shales on the edge or brow of the hill near Martelle tower no. 4, between Côte Sauvageau (section 6) and Côte de la Négresse, where a series of impure semi-crystalline, bituminous and fossiliferous limestone occurs. Côte de la Négresse is west of Côte d'Abraham. The contact between the two series is very much broken up, *i. e.*, between *d* and *e*.

Legend.

a = Laurentian or Archean;
b = Trenton terrane
c = Utica terrane } Trenton group.
d = Lorraine terrane
e = Quebec terrane
f = Lévis terrane } Quebec group.
g = Sillery terrane