

Plates IV. and V. These photos were taken from a point 79.3 feet south of the bottom point of the thick, irregular line shown in Plate VI. The photo on the left shows the appearance of the ice in 1906. The photo on the right, taken from exactly the same spot in 1907, shows how rapidly the ice is melting and exposing the rock-floor and the foot of the rocks in the background.

which discharges 4,092,000,000 tons of ice per year, whilst its understream washes out more than 7,000,000 tons per year of sand and gravel (like the material that formed the Canadian and American prairies) by its torrential waters. These, together with the roll-wash from the immense "calving icebergs" and vast extent of the ice-front, preclude the possibility of even the largest of cameras conveying any practical impression of even that single out-fall of one of the many hundreds of fiords fringing the mightiest ice-cap of the world that during uncalculated thousands of years has been ceaselessly burying Greenland, whose icy mountains are being resurrected by the gradual dissolution of that most momentous climate-diverting force wielded by the Greenland ice-cap, which levers the whole earth's crust around.

## GLACIAL ICE IS THE MOST DEFLECTING FORCE ON EARTH

6. Whilst the general forces of gravitation concentrate towards the centre of the earth, the greatest excrescence on the earth's crust is the 800,000 cubic miles of Greenland ice, which gravitates its mighty force southward towards the middle of the Atlantic Ocean, but as the Greenland territory to which the ice clings is part of the continuous crust of the world, the whole crust is gradually turned in that direction, sliding over the denser core as the strain of overcoming the equatorial protuberance is eased by earthquake adjustments at various times, as explained in my paper (read before the British Association for the Ad-

vancement of Science at their 1906 meeting) on "The Continuous Glacial Period."

7. That leverage of the Greenland ice results in the world-wide climate change, which is slowly making North America and Europe warmer, whilst the northern part of Asia (especially Siberia) is becoming colder, as the Greenland ice-cap trends to dip more below the Arctic Circle and will continue that southerly progression until equilibrium will be reached when about half of the Greenland ice-cap is melted backwards. Then it will be diverted during later centuries by the corresponding accumulations of glacial ice in another direction as the climatic change (vide the geological path of the North Pole traced by the dot-and-dash line on Plate III) does not recur in cycles, like the seasons, but is deflected by the gravitational force resulting from the stupendous difference in weight between the massive glacial ice that accumulates upon mountainous land in contrast with the thin ice formed on the sea in the Polar region weighed by gravitation balanced in the etherial poise of the earth, where every ton of matter tilts the scale of changing climate as measured by altitude and latitude.

8. We all know that for every degree of latitude travelled from the Equator, we increasingly reach cooler climates, and those of us who have studied ancient astronomy know that the climatic degree as measured by latitude was derived from the equinoctial diameters of the sun and moon combined, so that on March 21 and September 23 the noon-sun shining any-

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