

constantly hammered by the waves and constantly crumbling: the beach itself made of the flints outstanding after the softer chalk has been ground down and washed away; themselves grinding one another under the same ceaseless discipline; first rounded into pebbles, then worn into sand, and then carried out farther and farther down the slope, to be replaced by fresh ones from the same source.

(4.) Well: the same thing is going on *everywhere, round every coast* of Europe, Asia, Africa, and America. Foot by foot or inch by inch, month by month or century by century, *down everything* MUST go. Time is as nothing in geology. And what the sea is doing the rivers are helping it to do. Look at the sand-banks at the mouth of the Thames. What are they but the materials of our island carried out to sea by the stream? The Ganges carries away from the soil of India, and delivers into the sea, twice as much solid substance *weekly* as is contained in the great pyramid of Egypt. The Irawaddy sweeps off from Burmah 62 cubic feet of earth in every second of time on an average, and there are 86,400 seconds in every day, and 365 days in every year; and so on for the other rivers. What has become of all that great bed of chalk which once covered all the weald of Kent, and formed a continuous mass from Ramsgate and Dover to Beechy Head, running inland to Madamscourt Hill and Seven Oaks? All clean gone, and swept out into the bosom of the Atlantic, and there forming other chalk-beds. Now, geology assures us, on the most conclusive and undeniable evidence, that ALL our present land, all