

accepted the cautions of the author as to hasty deductions from the dip of strata at the surface.

Mr. Etheridge considered that the Lower Lias was of greater thickness at Burford than supposed by the author.

The Author, in reply, stated that he did not dispute the fact of the Palæozoic rocks being much disturbed and crumpled, nor did he deny that there may have been some disturbance of the upper beds. What he wished to point out was that the disregarding of the fact that strata thickened in certain directions might be and had been a fruitful source of error.

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## CORRESPONDENCE.

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### ORIGIN OF THE FLEET.

SIR,—On this subject, in your February number, my friend Mr. Kinahan follows Herschel, Lyell, Bristow, and Whitaker in attributing the heaping of the Chesil bank to “tidal currents.”

In your November number for 1869 you did me the honour to publish my opinion, at some length, against these high authorities. May I beg space now for a short repetition?

The Chesil bank is 42 feet above high-water. Shingle does not travel on the high-water surface of a “tidal current,” but if it did, how could this current land the shingle 42 feet higher than its own surface? The wind causes the travelling of beach, and I gave this sing-song rule for it—

“As the wind blows, the wave flows;  
As the wave flows, the beach goes.”

It is not a “tidal current,” it is the prevalent south-west wind which throws beaches across the mouths of so many of our streams on the south coast, and which drives them eastward as they enter the sea, and among them all the side streams which fall into and from the Fleet.

The reason of the enormous heaping of the Chesil bank is that the travelling of the beach down the wind is interfered with by the peninsula of Portland, which runs out to sea at right angles to the bank, and acts as a gigantic “natural groin.”

It is not only that shingle is now constantly torn down and again landed on the top of the Chesil bank, but a vessel has been heaved bodily over it and into the Fleet. Does Mr. Kinahan think that the vessel floated calmly over the bank on his “tidal current running parallel, or nearly so, to the coast line,” or that it was lifted over by the impact given to the wave by a south-west storm?

I wish that I could persuade my friend Mr. Kinahan to read Chapter viii. of “Rain and Rivers” on the “Travelling of Sea-beach,” where all this is discussed at length.

BROOKWOOD PARK, ALRESFORD,  
5th February, 1874.

GEORGE GREENWOOD, Colonel.

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### WELL-SINKING IN THE LINCOLNSHIRE FEN-DISTRICT.

SIR,—I should be very much obliged to any of your readers who could give me information, or references to books where I can obtain it, on the following point:—

At Lincoln the fen, that extends along the right bank of the