WEDNESDAY, APRIL 27, 1870.

THE CONVEXITY OF WATER PAINFULLY DEMONSTRATED.



UR readers will remember seeing in our columns some months since an advertisement to the effect that a Mr. John Hampden, of Swindon, offered the scientific world a wager of £500 that the surface of water was perfectly level. They may not,

perhaps, be aware, however, that the wager was accepted; and that, too, by no less distinguished a man than Mr. Alfred R. Wallace, the well-known traveller and originator of the theory of Natural Selection. With, we suppose, either a sublime pity for ignorance or a supreme contempt for charlatanerie, Mr. Wallace staked £500 to demonstrate to Mr. Hampden that the surface of water is not level, but is less or more convex, according to circumstances. Doubtless it appears strange to those familiar with the rudiments of physical science and with the practice of engineering, that any one, presumed to be compos mentis, should have made such a proposition as that put forward by Mr. Hampden. Wonderful, however, as it may seem, it is not the less a fact, and those who have had the misfortune to receive from time to time Mr. Hampden's nonsensical lucubrations will not be in the least surprised at this.

The matter was arranged in this wise:—After a somewhat lengthy correspondence between the two principal parties, it was settled that Mr. Wallace should conduct a survey of the Bedford Canal, that each of the parties should have a referee, and that any difficulty which might arise between the referees should be submitted to an umpire, whose decision should be final. Under these circumstances, Mr. Wallace chose as referee—first, Mr. Walsh, the editor of the Field, and subsequently, owing to Mr. Walsh's compulsory return to town, a local medical man, Mr. Coulcher; and Mr. Hampden selected a Mr. Carpenter on his side. Ultimately, Mr. Walsh was selected as final arbitrator, and the subjoined document was engrossed and signed:—

"The undersigned, having each deposited the sum of £500 in Messrs. Coutts's bank, do hereby agree that if Mr. Alfred R. Wallace, on or before the 15th day of March, 1870, proves the convexity and curvature, to and fro, of the surface of any canal, river, or lake, by actual demonstration and measurement, to the satisfaction of Mr. John Henry Walsh, of 346, Strand, London, and Mr. William Car-penter, of 7, Carlton-terrace, Thornford-road, Lewisham-park, London (or, if they differ, to the satisfaction of the umpire they may appoint), the said Alfred R. Wallace is to receive the above-mentioned two sums, amounting to £1,000, by cheques drawn by Mr. John Henry Walsh to his the said Alfred R. Wallace's order; and if the said Alfred R. Wallace fails to show such actual proof of the convexity of any canal, river, or lake, the above-mentioned sums are to be paid in like manner to Mr. John Hampden. Provided always that if no decision can be arrived at, owing to the death of either of the parties, the wager is to be annulled; or if, owing to the weather being so bad as to prevent a man being distinctly seen by a good telescope at a distance of four miles, then a further period of one month is to be allowed for the experiment, or longer, as may be agreed upon by the referees.

"February 8th, 1870."

"ALFRED R. WALLACE.
"JOHN HAMPDEN.

In accordance with these stipulations the survey was made on the 5th of March, and we need not say that Mr. Wallace was of course successful in demonstrating a distinct fall and rise in the water of the Bedford Canal between the two points selected.

As a natural consequence, Mr. Walsh handed over the two cheques for \$500 each to Mr. Wallace, who is thus partly rewarded for the trouble he has taken in convincing, or trying to convince, Mr. Hampden of the utter absurdity of his ideas.

But now comes the reaction. We cannot say what were Mr. Hampden's ideas as to the probability of any sensible person accepting the wager, but we can well conceive that a person who takes up the peculiar line which Mr. Hampden represents,

might imagine that in offering to stake £500 on the truth of his assertion, he was affording the world a strong proof of his opinion, with very little prospect of losing his money. Unhappily for him, Mr. Wallace is a gentleman who is not only desirous of convincing foolish men of their errors, but who is also most calm and temperate in his methods of argumentation, and who is not to be deterred from his purpose by any feeling that his high standing as a scientific man should prevent his coming in contact with persons of Mr. Hampden's eccentric way of thinking and writing. Hence those tears which metaphorically Mr. Hampden has shed in the pamphlet which we have just had the opportunity of reading,¹ and which, from the bitterness of feeling it displays, we can only attribute to the Swindon philosopher!

This brochure, written anonymously, is a species of abusive Jeremiad of the very lowest and most offensive type, and we can only say of it that, if it is not beneath the contempt of Mr. Wallace, it is a publication which that gentleman would do well to put into his lawyer's hands; for it is the most libellous and disgraceful tirade we have ever been pained Not only are Mr. Wallace and his referee by reading. assailed in language which is most ungentlemanly, but the umpire, Mr. Walsh, comes in for his share of the malignity which the writer of the pamphlet thinks it wise to employ. We do not care to lay before our readers many selections from this publication, but we cannot avoid giving a few extracts as a raison d'être for our comments. Speaking of Mr. Walsh, for instance, the pamphleteer says :- "Take these editorial functionaries away from their scissors and paste-pot, and they are found to be as great blockheads as other men-mere slaves to the popular taste, and most of them as venal as any hireling in exist-There is no doubt some moral or pecuniary pressure was brought to bear on the late decision, and, like all cowards, Mr. Walsh was afraid to uphold the truth, and the palpable evidence of the reports against the array of scientific opinion which he knew would be down upon him in the event of his giving judgment favourable to the anti-Newtonian theory." He speaks of Mr. Coulcher as a local "sawbones"; of scientific men as a class which, "next to horse-dealers and jockeys, bear the reputation of being the most tricky and unscrupulous in their assertions;" and generally he speaks of Mr. Wallace, by implication, as a liar, a cheat, and a swindler.

We can well comprehend how painful it must be to Mr. Hampden to have to pay £500 for indulging in the nonsense he has enjoyed so long, but this by no means justifies the course either he or his friends have taken in publishing this pamphlet; and we trust that Mr. Wallace, who has had the courage to put the cap and bells on Mr. Hampden's head, will equally apply the legal flagellum to the individual who has had the audacity and bad taste to write the pamphlet, and the cowardice to publish it anonymously.

¹ Is Water Level or Convex after all? The Bedford Canal Swindle Detected and Exposed. The Controversy ended, as all such impious frauds must end, in victory for truth, and the defeat and disgrace of those who oppose it.—"Knowest thou not this of old, since man was placed upon the earth, that the triumphing of the wicked is short, and the joy of the hypocrite but for a moment?"—JOB XX. 4, 5. Swindon: Alfred Bull, Printer, Victoria-street. 1870.