

TRIFLES.

What are trifles—who may guess
All a trifle's meaning?
Scattered ears on life's broad field,
For a wise one's gleaming,
Naught but hath its work on earth,
Fraught with pain or pleasure—
Links a nature's mystic chain,
Though of tiniest measure.

Trickling from the mountain height
Through the beech roots stealing,
See, a thread of silver light
Sunbeams are revealing;
Drop by drop it gathers fast,
Never resting, never,
Till it swells and flashes forth
In a glorious river.

'T was a single rain-drop fell
On a green bud thirsting—
Strengthened by the fairy draught,
Lo, a flower is bursting!
And an acorn lightly flung
In a pathway dreary,
Spreads an oak's broad shadows out
To refresh the weary.

But a flower's perfume may bear
Back through years of sorrow,
The sweet sunny morn of life,
With a bright to-morrow—
And a tress of silken hair
On a young brow parted,
Wake a fount of bitterest tears
For a broken-hearted.

Just a look may waken thoughts
Full of proud resentment—
Just a look may fill the soul
With a glad contentment;
Little prayers of children fair,
By their mother kneeling,
Touch a worn and weary heart
With a child-like feeling.

But a trifle seems a word
All unkindly spoken,
Yet the life-harp walleth low
For a gold-string broken.
But a trifle seems a smile
On a kind face beaming,
Yet a faint heart groweth strong,
'Neath its gentlo gleaming.

Trifles! each one hath a part
In our pain or pleasure,
Making up the daily sum
Of our life's brief measure;
All unnoted as they pass,
Scarcely worth our heeding,
Yet a trifle, it may be,
God's own work is speeding.

Churchman's Magazine.

SCIENCE.

Life in the Deep Sea.

There is a curious tendency in the human mind to allow itself to be misled by negative evidence. It arises chiefly from the conservative spirit of indolence which does not like to be disturbed in its repose, and which is better satisfied to believe that things do not exist, because we have not found them, than to undertake the labours of a fresh search. There is likewise a readiness to establish a scientific orthodoxy upon insufficient evidence, and to resent, as a pestilent heresy, whatever facts, opinions, or conclusions militate against the canons of credence which have been arbitrarily laid down. A good philosophical training removes prejudices, and establishes a readiness to believe upon sufficient proof being adduced, propositions that contradict its previous ideas. But

while professed students of science feel this influence in the earlier portions of their career, they often suffer a psychological ossification as age creeps over them, and they become as great opponents of novelty as if the powers of knowledge were exhausted and nothing new could possibly be true. Of course, as our store of facts grows larger, and sound induction establishes a larger number of principles from which accurate deductions can be made, many of the discoveries of science will simply realize anticipations previously formed; but we must still expect that Nature will be for ever a region of wonder and surprise, in which many things that were undreamt of, or which were even inconceivable before their discovery, will come to us with all the unquestionable credentials of belief.

Every department of science can offer illustrations of these views; but in none have old conceptions been more completely revolutionized than in marine zoology, so far as relates to the inhabitants of the profound depths of the sea. It was assumed that life rapidly diminished with increasing profundity, and that our plummets soon arrived at a region where no "dim beams," "amid the streams," "wove their network of coloured light," but where the world of waters rested for ages in unbroken silence and lifeless gloom. There was, however, little excuse for the extent to which these opinions were carried; for, as Dr. Wallich reminds us, the late Sir John Ross published in 1819 an account of his having obtained in Baffin's Bay various "sea-worms," "shrimps," and other creatures from "depths greatly exceeding those at which animal life was supposed to exist; and nearly thirty years subsequently Sir James Ross also reported having dredged up living creatures from great depths in the Antarctic seas;" but these important discoveries met with no attention, and it may be fairly said that the capture of the deep sea starfishes by the "Bulldog," was the first incident that materially modified pre-existing and erroneous views. To show the process of reasoning adopted by distinguished men in reference to this subject, Dr. Wallich quotes Mr. Page's *Advanced Text Book of Geology*, that, "according to experiment, water at the depth of 1000 feet is compressed one three hundred and fortieth of its own bulk, and at this rate of compression we know that at great depths animal and vegetable life, as known to us, cannot possibly exist." If Mr. Page had written "we guess," instead of "we know," he would have more accurately described the groundwork of a decision which naturalists had arrived at by common consent, without either examining the deep sea bed to ascertain what it really contained, or without acquainting themselves with some of the principal conditions that would determine whether or not it could offer the means of existence to any living thing. In the same spirit which dictated Mr. Page's remarks, Professor Phillips, in his *Origin and Succession of Life on the Earth*, expresses the belief that at 300 fathoms life is extinct, thus completely ignoring the 800 fathoms sounding from which Sir John Ross brought up a *caput medusæ*, and the various creatures he obtained at a somewhat smaller depth.

In science, as in other spheres of human activity, an unreasonable credulity often follows an equally unreasonable scepticism, and we are glad to notice that Dr. Wallich, while laudably anxious as "King of the Deep Sea," to increase the number of his subjects, boldly resists arguments in their favour, which although tempting are not conclusive. Thus Professor Ehrenberg assumed that the presence of undecomposed fleshy matter (*sarcodæ*) in foraminifera, whose shells were found at very great depths, was a proof that they had been alive in the situation in which they were discovered; but Dr. Wallich demonstrates the fallacy of this reasoning, although he expects its conclusion will ultimately prove to be correct, and that hereafter specimens will be obtained whose vital movements will leave the question in no doubt.

Before examining the circumstances under which deep sea organisms live, we will advert to the most startling acquisitions which Dr. Wallich made, especially to his famous starfish hawl. He tells us the sounding was taken in lat. 59° 27' N.; long. 26° 41' E., about halfway between Cape Farewell and the northwest coast of Ireland. The depth was 1260 fathoms, and "adhering to the last fifty fathoms of the line, which had rested on the ground for several moments, were thirteen *Ophiocomæ*, varying in diameter across the arms from two to five inches." These animals moved their arms after reaching the deck. The starfishes so remarkably obtained appeared to be living in the midst of their "normal haunts." In their digestive cavity was found a quantity of fresh-looking *globigerinæ*, and they seem to have been associated with creatures of a still higher type. Thus we read "in these soundings (including that in which the starfishes were obtained), many cylindrical tubes occurred, varying from one-eighth to one-half and inch in length, and from one-fiftieth to one-seventieth of an inch in diameter.