

DIDO DESERTED.

BY J. A. R.

Forsaken Dido, lonely and forlorn.

Wand'ring in tears along the wild sea beach,
Watching the cruel waves which late had borne
Her love and life so far beyond her reach.

Striving to view from out the cloud of tears
Which veils those eyes, till now so purely bright,
The white sails of the ships, anon she hears
The wild birds screaming in their seaward flight.

She hears the sobbing of the restless sea,
Lapping the cold gray sand in its embrace,
Filling her brain with its sad melody—
She feels the salt spray damp upon her face.

Moaning she cries across the watery plain,
"Ah love! sweet love! come back, come back to me,
I cannot bear for long this weary pain,
I cannot live and be apart from thee."

And then she listens o'er the heaving wave,
Thinking to hear from it her love reply,
But all is still and silent as the grave,
Save for the sobbing sea and wild birds' cry.

Seeming to mock her in her wild despair—
Then low she sinks upon the wind swept shore,
Till the brown sea weed mingles with her hair,
And cold waves wash the limbs that feel no more.

THE NATURE OF SOUND.*

BY REV. A. J. BELT, B. A.

What is sound? "Don't you really know?" the would-be scientific student doubtfully queries; and, from the high pedestal of his own superior acoustical knowledge, we are deluged with a supply of "airwaves," "vibrations," "condensations and rarefactions," enough, one might fancy, to completely annihilate whoever should be so bold—or so unfortunate, perhaps—as to question the undulatory theory of sound. But, supposing we do object to the definition, and venture to support another—opposing—theory, what then? "How can you?"—"How dare you?"—the embryonic physicists, on all sides, exclaim with holy horror at the seeming sacrilege depicted on their countenances, and then, with scarcely a moment's warning to prepare ourselves for the onslaught, the illustrious names of eminent supporters of the wave theory are hurled upon our heads. Yet, this theory of the nature of sound has been assailed, and in the humble opinion of the writer of this paper, successfully.

Although we are not easily frightened, yet it required some time before our courage was sufficiently worked up to push on the stone, already set rolling, against the huge superstructure erected by the undulatory hypothesis of sound, gathering and growing as it has been for 2,500 years. The foundation laid by Pythagoras, it has been added to and developed by scientific men ever since, and now rests upon the shoulders of Newton, Laplace, König,

*The subject of a large portion of a work entitled "The Problem of Human Life," by A. Wilford Hall, published by Hall & Co., New York, from which exceedingly interesting and very convincing treatise, the arguments in this paper are mostly drawn. Although, of course, the writer fully feels his inability to present the subject in as lucid a manner as the author of the above admirable work has done, yet he hopes that even if the article is not sufficiently convincing to change the mind of any, it will at least prove interesting.

Tyndal, Hemholtz and Meyer—a pretty strong foundation surely, and a big stone needed to knock down such a building, much larger than we could lift. But then the stone has already been set rolling—other hands have been stretched out to give it a shove and increase its impetus—and, without a spark of *egoism*, we think ourselves able to give a tiny push, at all events, we run behind and try, as a young child adds his strength to that of the full grown men who are endeavouring to pry up a firmly embedded stump which clings very tenaciously to the earth, but which is, nevertheless, doomed to loose its hold and make room for something better.

"Something better?" the doubting Thomases sneeringly exclaim. Ah, yes, we said it—but you, yourselves, shall judge. Professor Huxley, somewhere says, if we remember rightly, "Every hypothesis is bound to explain, or at any rate, *not to be inconsistent with*, the whole of the facts it professes to account for; and if there is a *single one* of these facts which can be shown to be inconsistent with the hypothesis, such hypothesis *falls to the ground*. One fact with which it is positively inconsistent, is worth as much, and is as powerful in negating the hypothesis, as *five hundred*." If we may be allowed to express an opinion, the worthy Professor could not have given utterance to a more profound truth. Now, our unwarrantable obstinacy permits us to see *inconsistencies* in the idea that sound consists merely of "air-waves" thrown off by a sounding instrument. We expect a drubbing for our boldness—we look for nothing else—but to all who should be tempted to open their batteries upon us we would gently say, "don't"—it might not be advisable. According to this learned Professor of Natural History, then, one single inconsistency in any hypothesis "is as powerful in negating it as five hundred." We would like to spin out the inconsistencies in the undulatory hypothesis of sound to "five hundred," for we have the conceit to think it can be done; but, if, on high scientific authority, *one* is sufficient, we need not take up so much time.

But we must haste and give that "shove" to the projectile, which, we think, will hurl the wave theory to the ground, and not only demolish it, but accomplish the startling and unusual feat of erecting "something better" in its stead. You are getting curious, perhaps, to know what it is. So, before going further, we explain a little, and shall unfold as we proceed. The reference is to a theory—only a few years old, as far as we know—that sound is a *substantial entity*, consisting of corpuscular emissions; and that, therefore, it is lawful to talk of sound atoms or molecules as distinguished from the particles of the air—the atmosphere acting merely as a conductor for its transmission, just in the same way that water, wood, iron and rock do.

One thing which seems to strike the mind very forcibly is this fact: Man is endowed with five senses, viz., touch, taste, smell, sight and hearing. Now, the first three are acknowledged to be molecular, and the only way they can be perceived is by the actual contact of the particles of the thing touched, tasted or smelled with our senses, *e. g.* we gain knowledge of the shape of a thing touched by the actual contact of its particles with our bodies, we perceive taste by the actual contact of the particles of the thing tasted with the palate, smell is the actual contact of the particles of odour with the olfactory nerve. On what principle of reason, then, is a line drawn—the remaining two senses requiring clever men to invent an all-pervading, ethereal substance for their transmission to the optic and auditory nerves—when no earthly neces-