

"You take 'em in, Kitty, while I tend to the valises. They're expectin' ye inside. They've got a letter. I'll wait out here."

The little dark head nodded once more.

"Thirteen hundred and one," his companion counted, wisely, "thirteen hundred and two!"

The three getting out of the carriage and going up the steps and in under the heavy portals of the First State Hospital for the Insane, her feet ran on ahead.

The old man waited in the wet and cold, holding the horses.

He could not share her joy in the success of their undertaking. He blinked out dejectedly into the rain.

Even turned back on the bird-cage road, alone on the front seat, with behind him, curiously, in the carriage the pair of birds whom it had been planned to leave, he stooped without conceit.

Thirteen hundred and one.

How Wonderful Is Love!

BY FLORENCE EARLE COATES

HOW wonderful is love!
 More wonderful, I wis,
 Than cherry-blossoms are when Spring's first kiss
 Warms the chill breast of earth,
 And gives new birth
 To beauty! High above
 All miracles—the miracle of love,
 Which by its own glad and triumphant power
 Brings life to flower.
 Oh, love is wonderful!
 More wonderful than is the dew-fed rose
 Whose petals half unclose,
 In gladness of the light,
 When first the Dawn comes robed in vesture cool
 Of fragrant, shimmering white!—
 More wonderful and strange
 Than moonrise, which doth change
 Dulness to glory—
 Yea, with a touch transforms the mountains hoary,
 And fills the darkling rills with living silver bright!

Not music when it wings
 From the far azure where the skylark sings
 Is wonderful as love!—
 Not music when it wells
 From the enchanted fairy-haunted dells
 Where, shrined mid thorn and vine—
 An ecstasy apart,
 Drawn from the life-blood of a yearning heart—
 The nightingale pours forth forever
 The rapture and the pain, that naught can sever,
 Of love which mortal is, yet knows itself divine!

The Question of the Atom

BY ROBERT KENNEDY DUNCAN

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THE question of the atom is really one of the most interesting and informing in contemporary knowledge. It is so interesting because the mere question "*Is there an atom?*" has been the *casus belli* of a fratricidal strife which for almost a generation has divided chemist against chemist, and it is so informing because it illuminates so clearly the workings of human nature in those cold regions of Science in which presumably, and ideally, human feelings have no place. The question "*Is there an atom?*" has associated with it all the *odium theologicum* of medieval days, all the proverbial hatred of contending divines, and, when chemist meets chemist, because the attitude of each man is fixed, because it is a personal matter, it is as impossible to discuss in intellectual honesty as either politics or religion. This is of course sufficiently curious and wrong, but the wrongness of it is emphasized through the consideration that it is a fundamental matter in the teaching of chemistry. When about half the chemical departments of the colleges and universities are teaching chemistry on the basis of the atomic theory and the other half refuse to mention the word atom, or mention it apologetically with a blush, and when, as is oftentimes the case, there is disaccord on the subject, and high debate, in any one instructional staff, it affords a poor prospect for a future crop of investigational chemists, and it may even be suspected that there is about the whole matter a certain unreason. All this may be a matter of surprise to the cultured layman, who probably takes his atoms, as he does his microbes, as a fact. But atoms are not a fact, but a theory, and therein lies the root of the trouble. We have had many theories in the past, some of them great fruitful theories, such as that of phlogiston, and of caloric, and

of the corpuscular nature of light, and these theories are to-day nothing but discarded rungs in the ladder of man's advance. Is it not possible that the atomic theory is no more than these the expression of a truth of nature? Thus, one reason for all this regrettable disaccord is purely pedagogical, certain chemists believing that, owing to the tremendous utility and scope of the atomic theory in the explanation and elucidation of natural phenomena, some young gentlemen at the threshold of their science may find a quagmire of confusion between fact and theory, and therein a pitfall for their unwary feet. It is true that the physicist with his undulatory theory is not worried by such fanciful considerations, but cheerfully uses and teaches his light-waves, which, by the way, no man has seen any more than he has an atom. The biologist, too, is in no whit better case, yet he, too, teaches and uses his theory of evolution without overmuch regard for the indiscriminating student. There must be other reasons for this curious attitude of certain informed chemists, though these can scarcely be considered in an article of this general character. Meanwhile it may occur to the reader that the refusal of certain chemists to base their teaching on the conception of atoms may be due to evidence against the validity of the atomic theory. No. On the contrary—and this will be the subject-matter of my paper. The fact of this disaccord is introduced here merely to apprise the reader that in presenting and drawing conclusions from some certain new and very interesting knowledge, this knowledge is subject to partisan interpretation, to such an extent that the layman who happens to peruse these pages may, perhaps, form a judgment concerning it as good as that of any average party to the controversy.